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CONFERENCE PAPERS –

PART ONE

THE SOUTH-EAST REGIONAL
CONFERENCE OF PSYCHOLOGY:
"SOUTHEASTERN EUROPE
LOOKING AHEAD –
PARADIGMS, SCHOOLS, NEEDS
AND ACHIEVEMENTS OF
PSYCHOLOGY IN THE REGION"
Sofia, Bulgaria
30 October – 1 November 2009

Issue 3-4, 2009

EDITOR'S NOTE

Dear Colleagues and Friends,
Dear SEERCP2009 Contributors and Readers of the Bulgarian Journal of Psychology!

Welcome to The Bulgarian Journal of Psychology's special issue on the South-East European Regional Conference of Psychology (SEERCP2009), Sofia, 30 October – 1 November 2009, "Southeastern Europe Looking Ahead: Paradigms, Schools, Needs and Achievements of Psychology in the Region", featuring in two volumes the conference papers presented at conference symposia.

The Bulgarian Journal of Psychology is the official scientific journal of the Bulgarian Psychological Society since 1973. The Bulgarian Psychological Society is the oldest (est. 1969) and largest national association of professional psychologists in Bulgaria. With the support of the International Association of Applied Psychology (IAAP), The International Union of Psychological Science (IUPsyS), The International Association of Cross-Cultural Psychology (IACCP), and The European Federation of Psychologists' Associations (EFPA), The Bulgarian Psychological Society organized SEERCP2009 in Sofia, Bulgaria. Details on the conference program, the complete list of contributors, and annotation of the SEERCP2009 scientific symposia, workshops, round-tables and thematic discussions are available through SEERCP2009 web-based archives: http://RCP2009.wordpress.com.

This first volume – **Bulgarian Journal of Psychology, 2009, 3-4, Conference Papers, Part One,** includes original papers presented by SEERCP2009 contributors in the first three scientific SEERCP2009 symposia:

Adolescents' Health Psychology focused on understanding Health Behavior, Lifestyles and Needs of Young People in the SEE region.

School, Educational and Developmental Psychology focused on Prevention of Bullying in Schools, and Youth and Family Problems.

Clinical and Counseling Psychology.

The next volume – **Bulgarian Journal of Psychology, 2010, 1-4, Conference Papers, Part Two,** features papers presented by SEERCP2009 contributors in the symposia 4 to 10, including Applied Social Psychology, Psychology in the Economy, Public Policy and Government, Organizational Psychology, Disaster Management, Psychological Assessment, Research in Juvenile Justice Services, and Applied Psychology as a Profession.

Based on feedback from SEERCP2009 participants the Regional Conference of Psychology achieved its goals and created new opportunities for further exchange and cooperation between psychologists across the region and worldwide. We cordially invite all our colleagues from the South-East Europe to submit their research papers and study reports to the Bulgarian Journal of Psychology.

Putting together this two-volume special issue of the Bulgarian Journal of Psychology took the work of many SEERCP2009 reporters, journal editors, and designers throughout the SEERCP2009 organizing committee. Many thanks to all colleagues who made this publication possible. Please send your feedback to journal@psychology-bg.org.

Dr Plamen Dimitrov, Special SEERCP2009 Editor,
Chair of SEERCP2009 Organizing Committee

THE SOUTH-EAST REGIONAL CONFERENCE OF PSYCHOLOGY: SOUTHEASTERN EUROPE LOOKING AHEAD – PARADIGMS, SCHOOLS, NEEDS AND ACHIEVEMENTS OF PSYCHOLOGY IN THE REGION SOFIA, BULGARIA, 2009

MIKE KNOWLES
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Abstract. *The South-East European Regional Conference of Psychology was held in Sofia from 30 October –1 November 2007 under the Patronage of the President of Bulgaria and the auspices of the International Association of Applied Psychology, the International Union of Psychological Science, and the International Association of Cross-Cultural Psychology, and was supported by the European Federation of Psychologists' Association and the European Health Psychology Society. It was hosted by the Bulgarian Psychological Association whose President was Dr. Plamen Dimitrov with assistance from the Department of Psychology of Sofia University and the Institute of Psychology of the Bulgarian Academy of Sciences. The Chair of the Local Organising Committee was also Dr. Plamen Dimitrov and the Chair of the Scientific Program Committee was Professor Sava Djonev. The Conference succeeded in attracting participants from 32 countries including 12 from the South-East European region. The Scientific Program*

GENERAL IDEA

The South-East European Regional Conference of Psychology was held in Sofia from 30 October –1 November 2009 and was the eighth regional conference organized under the auspices of the International Association of Applied Psychology (IAAP), the International Union of Psychological Science (IUPsyS), and the International Association for Cross-Cultural Psychology (IACCP). Regional conferences are held every two years in between the large international congresses organized by IAAP and IUPsyS. They were introduced as a joint venture among IUPsyS, IAAP and IACCP to review the current state of psychology in a particular region and foster its development by increasing communication between sci-

entific researchers and professionals, disseminating psychological knowledge and expertise, and supporting the organization of psychology within the region. Previous regional conferences have been held in Guangzhou, China (1995); Mexico City, Mexico (1997); Durban, South Africa (1999); Mumbai, India (2001) ; Dubai, United Arab Emirates (2003) ; Bangkok, Thailand (2005); and Amman, Jordan (2007).

SPECIFIC IDEA

The present regional conference was held under the Patronage of the President of Bulgaria, and received financial support from IAAP, IUPsyS, IACCP, EFPA and EHPS. It was hosted by the Bulgarian Psychological Society whose President was Dr. Plamen Dimitrov with assistance from the Department of Psychology of Sofia University and the Institute of Psychology of the Bulgarian Academy of Sciences. The Chair of the Local Organising Committee was also Dr. Plamen Dimitrov and the Chair of the Scientific Program Committee was Professor Sava Djonev.

One of the distinguishing characteristics of the SEE region is that by and large psychologists tend to look towards Western Europe and thus SEERCP offers the Balkan and neighbouring countries two golden opportunities. One is to foster the growth of cooperation, collaboration and cohesion in the research and practice of psychology throughout the region. The other is to stimulate the development of the national societies and associations of psychology in SEE both individually and collectively.

The Conference succeeded in attracting over 350 participants of whom approximately half came from the regional countries including Croatia, Cyprus, Greece, Hungary, Poland, Romania, Serbia, Slovenia and Turkey, and from countries immediately outside the SEE region including Armenia, Moldova, Russia and the Ukraine. Likewise, the other half of the participants came from other Western European and neighbouring countries such as Denmark, France, Germany, Greece, Ireland, Italy and the United Kingdom as well as other countries stretching to the four corners of the world including Australia, Canada, Singapore, South Africa and the United States of America.

The Conference was held on the central campus of St. Kliment Ohridski Sofia University, Bulgaria's principal University, which is located in downtown Sofia. Sofia University was established in the immediate aftermath of Bulgaria gaining independence in 1879 and the building on what is now its central campus comprises three magnificent sandstone wings, all of neo-classical design. The University is located on one corner of a triangle comprising the inner precinct of Sofia and occupies this position together with other cultural and scientific institutions such galleries, libraries, and the Academy of Sciences. The other two corners of

the triangle represent the shopping and commercial centre of the city and the political and administrative nucleus of the nation.

THE SCIENTIFIC PROGRAM

The Scientific Program Group was coordinated by Prof. Sava Djonev and its structure and content was developed through consultation and collaboration and was based upon over 150 proposals and suggestions that were received by the Organizing Committee from national associations of psychology, other psychological institutions and individuals, all from throughout the SEE region.

On the first day of the Conference the Keynote Addresses were presented in four streams each of three session along the thematic orientations covering achievements and challenges of applied psychology in the SEE countries; status reports from national societies or associations of psychology in the region; and international visibility and mobility of SEE psychologists.

On the second and third days of the Conference symposia, individual papers and poster sessions were presented in ten parallel sessions along the following themes:

- **Adolescents' Health Psychology** focused on understanding Health Behavior, Lifestyles and Needs of young people in the SEE region.
- **School, Educational and Developmental Psychology** focused on Prevention of Bullying in Schools, and Youth and Family Problems.
- **Clinical and Counseling Psychology** focused on Positive Psychology in Psychotherapy and Mental Health Research and Practice.
- **Applied Social Psychology** focused on Mass Media, Crime and Civil Society Research including Minorities and Social Exclusion.
- **Psychology in the Economy, Public Policy and Government** focused on integrating psychological dimensions into Modern Economic Models and Public Policy Making.
- **Organizational Psychology** focused on Developing Human Capital and Organizational Effectiveness.
- **Disaster Management** focused on Crisis Intervention Models and the need for Professional Network Development.
- **Psychological Assessment** focused on Test Standards and Professional Training of Test Administrators.
- **Research in Juvenile Justice Services** focused on System Reform.
- **Applied Psychology as a Profession** focused on Teaching Psychology, Professional and Ethical Standards of Psychologists, the EuroPsy and National Certification of Psychologists, Capacity Development of Psychologists' Associations and Practices, and Psychology and Public Issues.

In addition, in order to further the capacity-building efforts of the Conference, some 20 Round Tables were organized, again on a thematic basis around topics such as:

- The Future of Regional Networking among Professionals and Institutions
- Building conditions for successful Joint Research Projects, Academic Links, Professional Training Programs, and Regional Exchange Initiatives
- Is there a need for an English-language Regional Journal of Psychology?
- Is there a shared development agenda for SEE Applied Psychology?
- Organizing regular and coordinated Regional Meetings and Conferences
- Implementing EuroPsy Certificate of Psychology in the Region – experience, readiness and concerns
- Building effective National Societies or Associations of Psychology
- Youth issues in Psychology.

The Conference also allowed for participants to work together in Open Forums and Future Search Discussions, Training and Demonstration Workshops, Information Exchange and Ad Hoc Meetings, and Book and Test Exhibitions.

A special feature of the Conference was the Young Psychologists' Group coordinated by Borislav Slavchov. Thus the Scientific Program provided for a specific stream of student symposia and workshops where students were able to present their studies and projects in especially designed 2-hour sessions using interactive methods, posters, powerpoint presentations, short videos, role-plays and simulations. A Youth Roundtable was also held to address the topic "How to do it in Southeast Europe – Studying and Career in Psychology?" and this provided time and space for an open discussion on the specific issues of students and young psychologists in the SEE region. Young psychologists were also able to attend a special 3-hour workshop on "EU grants – possibility for exchange and collaboration between psychologists in SEE".

SOCIAL PROGRAM

The Opening Ceremony was held in the main hall of the University, the Aula, a grand auditorium which was approached via a magnificent staircase that rose out of a spacious and spectacular marble-studded foyer. A letter of welcome from the Bulgarian President who was overseas on official duties was read out, and speakers, among others, included the Minister of Education, Youth and Science, Mr. Sergei Ignatov; the Chair of the Conference Organizing Committee, Plamen Dimitrov; the Chair of the Scientific Program Committee, Sava Djonev; the President of IAAP, Mike Knowles; and the President of IUPsyS, Rainer Silbereisen.

The Welcoming Ceremony was held in the Archaeological Museum which befitted the long history and rich culture of Bulgaria. It began with folk dancing by young children dressed in traditional national costumes and after a short official welcome by the IAAP President delegates mixed and mingled delightfully over servings of selected Bulgarian finger-foods and wines.

Other social events include a Folklore Dinner; sight-seeing tours of the city of Sofia highlighting its beautiful tree-lined boulevards, parks, and impressive public buildings; pre– and post-conference day tours to Bulgaria's second largest city of Plovdiv with its 19th Century-styled old town featuring winding cobbled streets and a Greek amphitheatre dating back to the 2nd Century AD; a restful holiday in sea-side towns on the Black Sea; or, for the more adventurous, hiking in the fir and pine forests at the foothills of the Bulgarian mountains.

The Closing Ceremony was again held in the Aula with concluding addresses by Plamen Dimitrov, Sava Djonev, Irina Zinovieva and Nikola Yordanov, and final congratulations for the wonderful and comprehensive success of the Conference were expressed in a vote of appreciation by Mike Knowles and a gift on behalf of IAAP presented by Ray Fowler.

In one sense the Closing Ceremony marked the end of a phase of activity but in another way it was the beginning of a new era in which planning has already started to organize a subsequent conference in three years time.

PAPERS OF SYMPOSIUM 1: ADOLESCENTS' HEALTH PSYCHOLOGY

COMPARATIVE ANALYSIS ON POSITIVE HEALTH INDICATORS BETWEEN BULGARIAN AND ROMANIAN ADOLESCENTS

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Abstract. *Data from the joint project "Bulgarian and Romanian youth's health and behaviour", part of the International HBSC 2005/2006 study, are presented. Indicators of positive health: self-rated health, multiple health complaints and life satisfaction are compared in representative samples of Bulgarian and Romanian adolescents, aged 11, 13 and 15. Results show that there is a common tendency for higher reporting of fair or poor health and multiple health complaints among older children which is in line with the International HBSC data. More of the Romanian adolescents rate their health as fair or poor and have multiple health complaints compared to Bulgarian adolescents. Although Romanian schoolchildren report more health complaints that rank them 5th and 6th among all participating countries, the increase of multiple health complaints between 11 and 13 is more pronounced in Bulgarian schoolchildren. Both Bulgarian and Romanian adolescents are more likely to report low life satisfaction. While for Romanian schoolchildren this holds true for all age groups, a significant decline in levels of life satisfaction between ages 11 and 13 is found in the Bulgarian sample. The association between family affluence and positive health indicators is discussed.*

Keywords: *adolescents, self-rated health, multiple health complaints, life satisfaction, joint Bulgarian and Romanian project, HBSC 2005/2006 study, logistic regression models*

INTRODUCTION

Amongst the multitude of health definitions a basic distinction is made between negative and positive health with negative definitions of health pointing towards the absence of ill health, whereas positive definitions add more to health – for example, enjoying good health, feeling fit, etc.(Ravens-Sieberer et al., 2009b).The study of health from this positive perspective led to the recognition of the importance of individual, subjective experience of health and illness. A paradigm shift in criteria used to evaluate medical outcomes within the last decades favoring patient oriented outcomes was made: How a person feels physically and psychologically and manages with his/her everyday life, is now considered to be as important as the somatic indicators of health (Bircher, 2005). New terms were coined to integrate this new look at medical outcomes – subjective health or health-related quality of life. The concepts of subjective health, health-related quality of life and well-being are associated and can hardly be separated from one another (Ravens-Sieberer et al., 2009a).

In line with these conceptualisations, Health Behaviour in School-aged Children (HBSC) study follows a dynamic and multifaceted model of health. This means that to be in good health includes the relative absence of emotional distress and chronic conditions and the presence of well-being and/or overall positive evaluation of health. Health perception as a whole, life satisfaction and subjective health complaints are considered different aspects of subjective health. Within the HBSC study, the three mandatory items used to assess positive health in children and adolescents cover these aspects – the psychological perspective is covered by means of "Self-rated Health" and "Life satisfaction", and physical position – by means of the "Health Complaints Index" (Ravens-Sieberer et al., 2009b).

This study reports data of the research project "Bulgarian and Romanian youth's health and behavior: Joint European multilevel approach for understanding health choices, practices and needs of youth". This project has run in parallel with the first participation of the two countries in the 2005/2006 study wave of the international HBSC survey, conducted since 1982 at four-year intervals.

The aim of the study is to describe and compare the health state and the role of social context in life-styles and health behaviour of adolescents in Bulgaria and Romania – countries in a similar sociopolitical situation, on the basis of relevant national representative data, and discuss the cultural specificity of findings. Detailed description of Bulgarian and Romanian data on: self-rated health, life satisfaction, the prevalence of subjective health complaints and their variation in level across gender and age are the first steps of the comparison. Next is the analysis of the relative importance and independent effects of different factors within the social contexts of adolescents' life – family, peers and school, as predictors of the studied health indicators.

We suggest that health outcomes, including self-rated health, life satisfaction, health complaints, are a function of the socioeconomic conditions, gender and social relations in ways that are specific for each country. Social support from family and peers is also supposed to play an important role on health outcomes.

METHODS

Study design and procedure

Bulgaria and Romania took part in the 2005/2006 HBSC survey (among the 41 European and North-American countries and Israel that participated in it). Children aged 11, 13 and 15 visiting regular schools were studied. The investigated samples comprised 4854 Bulgarian school children (1586 at the age of 11, 1580 at the age of 13 and 1688 at the age of 15), and 4684 Romanian children (1639 were the 11-year-olds, 1440 – 13-year-olds and 1605 – 15-year-olds).

Instruments and Variables

This paper examines three different aspects of subjective health: the general health perception, overall life-satisfaction and subjective health complaints.

> *Self-reported health* was assessed by the question: "Would you say your health is…" with answer categories: *"excellent", "good", "fair"* and *"poor".* For the international comparison and some analysis the answers *"fair" and "poor"* health were combined (summed), contrasted with the others.

> *Life satisfaction:* Life satisfaction was assessed with the Cantrill ladder. Children were presented the picture of a ladder with steps ranging from 0 to 10 and were asked to indicate where on the ladder they "… feel standing at the moment", with the top of the ladder (10) indicating the best possible life and the bottom (0) representing the worst possible life". The answers were classified as expressing *"low" (categories 0–5)* versus *"normal-high" life satisfaction (categories 6–10).*

> *The "Health Complaints Index"* (also called *HBSC symptom-checklist, HBSC-SCL*) assesses the occurrence of eight subjective physical (headache, stomach-ache, backache, dizziness) and psychological health complaints (feeling low, irritable-bad tempered, nervousness and sleeping difficulties). The question was how often they had been experienced in the last 6 months. The students responded on a five-point scale that ranged frequency: *"about every day", "more than once a week", "about every week", "about every month",* and *"seldom or never".* For the current study, the mean item score was calculated resulting in values between 1 (worst health) and 5 (best health), as well as the prevalence of health complaints with the answers "about every day' and "more than once a week", on the one hand, and "seldom or never",

on the other. Respondents with recurrent multiple health complaints (two or more complaints "about every day", "more than once a week") are considered in the HBSC study as displaying noticeable subjective health complaints.

Several more mandatory items were selected to examine the differential impact of social contexts of adolescents' life (family, school and peers) on the studied health indicators.

Family structure – assessing the type of family the child lives in – with both parents; in a single parent family; in a step-family or other (foster home, with grand parents, etc).

The socio-economic status of children's families was assessed with the Family Affluence Scale (FAS). The FAS asks about family car ownership, having an own unshared room, the number of computers at home, and number of times the child went on holidays in the past year. The FAS was collected in categories ranging from 0 to 7 which were recoded into *low (0–3), medium (4–5),* and *high (6–7) FAS level.* The validity of the FAS was shown in several studies 30.

The perceived family wealth was an additional question assessing the subjective feelings of the adolescents concerning the economic status of their family: "How well off your family is?" with five answer categories that were recoded into *"well off", "average"* and *"not at all well off".*

The parent-child communication was assessed with a question concerning the easiness of adolescents to talk to their parents about things that bother them. The response categories were recoded into *"Easy" and "Difficult".*

Schoolwork pressure was studied by combining the four response options of the question "How pressured do you feel from your schoolwork at present?" into *"not pressured" and "pressured".*

Classmates'support – a composite index was used on the basis of three items indicating the extent to which students perceived they were liked and supported by their classmates (measured with either *agreement* or *disagreement).*

Time spent with friends focusing on informal relations within the social network, an index on the basis of the two questions on how many days after school/evenings a week students spend time with friends was used denoting *often* and *seldom.*

Age and gender were also studied as factors influencing the health outcomes.

Statistical analyses

Statistical analyses were carried out with the software SPSS 15.

RESULTS

Self-rated health

The common tendency observed in the HBSC studies for higher reporting "fair" and "poor" health among older children is seen in both Bulgarian and Romanian adolescents, more pronounced in the Romanian sample (F=116.9, p<.001, η^2 =.012). The higher level of "fair" and "poor" health is usually reported by 15-year-olds and this is especially true for girls (fig.1). More Romanian girls rate their health as "fair" and "poor" in all the three age groups and at the age of 15 they reach 26%, compared to Bulgarian girls that are 17% (Vasileva et al., 2008; Baban, 2009).

The International report of 2005/2006 HBSC study (Currie et al., 2008) describes a clear geographic pattern according to which boys living in Southern Europe are not likely to report "fair" and "poor" health compared to boys in Northern Europe. This holds true for Bulgarian boys; Romanian boys report "fair" and "poor" health more frequently, especially at 15.
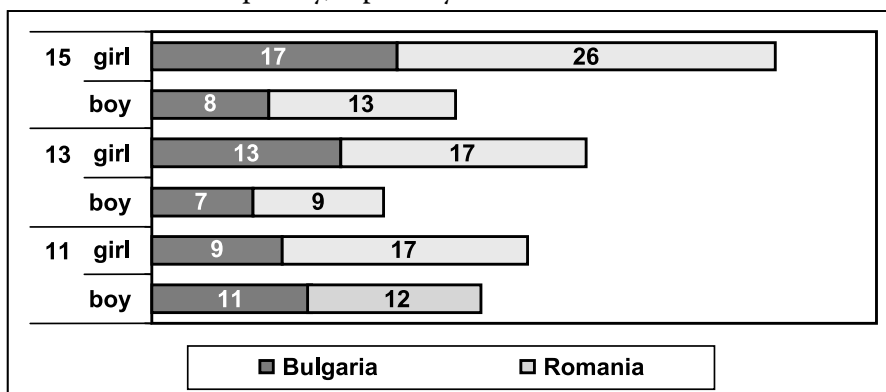
FIGURE 1. Proportion of adolescents reporting "fair" and "poor" health by age and gender (in %).

Subjective health complaints & Multiple health complaints

As a whole the pattern of subjective complaints for Bulgarian and Romanian adolescents is similar but Romanian adolescents report experiencing more often most symptoms[1] with the exception of feeling nervous and difficulties in sleeping (Fig.2).

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[1]   p<.001 for all symptoms with the exception of irritability – p<.02; η2 = .001÷.01, only for feeling low η2=.118

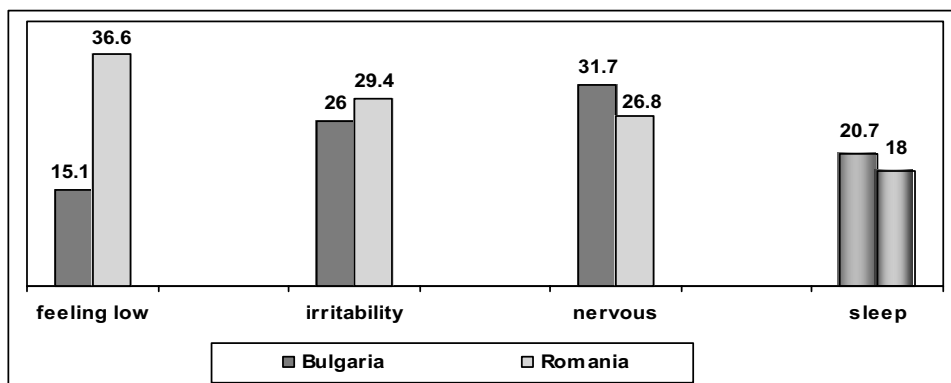**FIGURE 2. Proportion of adolescents reporting psychological health complaints (in %).**

Adolescents increasingly report <u>feeling low</u> with age and this is especially true for girls. The proportion of Bulgarian girls that report feeling low *"seldom or never"* decreases impressively with age: at 11 yrs – 75.4%; at 13 yrs – 52.9% and at 15 yrs – 31%. Decrease is seen with Romanian girls as well, but they start at a quite different level: at 11 yrs only 36.7% never had felt low (compare with Bulgarians at 15!), at 13 – 22% and at 15 – 11.5%.

Bulgarian girls that report feeling low *"about everyday" and "more than once a week"* are 10.3% at the age of 11 and increase progressively – three times (to 33.1%) at the age of 15. Much more Romanian girls report feeling low even at the age of 11 – 36.8% and the percentage increases to 51.2 % at the age of 15. We should note that Romanian boys also report feeling low more than Bulgarian boys do: as a whole about 1/3 of them report feeling low *"about everyday"* and *"more than once a week"* and their number increases with age (37.7% at the age of 15); Bulgarian boys report feeling low less than 10% and their number remains stable with age.

> <u>Feeling low</u> is the most common psychological complaint for Romanian adolescents, for Bulgarian adolescents it is <u>irritability or bad temper.</u>
> <u>Headache</u> is the most common somatic complaint for both Bulgarian (18%) and Romanian (24%) children. 37.2% of the Romanian and 50.9% of the Bulgarian girls reported they had never or seldom had headache. Romanian girls that report to have a headache *"about everyday"* and *"more than once a week"* are 30.8%, and Bulgarian girls are 22%.

The frequencies of <u>recurrent or multiple health complaints</u> (*two or more complaints experienced "about every day' and "more than once a week"*) were computed for the international comparison as it is suggested that "health complaints are common in adolescence and tend to occur in cluster rather than as

single symptoms" (in Ravens-Sieberer et al., 2009). When we look at the prevalence of multiple health complaints across age and gender we could see that boys differ insignificantly at all three age levels and even score quite similarly at 11, 13 and 15. Girls, on the contrary, show significant differences at each age level, the greatest at the age of 11. Their complaints increase progressively with age, this increase is most pronounced for Bulgarian girls between 11 and 13.

Life satisfaction

Both Bulgarian and Romanian adolescents become less satisfied with their lives with age (Fig.3), and this is especially so for girls. But while 91% of Bulgarian girls at the age of 11 feel satisfied, Romanian girls the same age show definite lower life satisfaction – 91% v/s 75%. A reversed tendency is observed for Romanian boys of 11 and 13 – more report low satisfaction at 11 years than at 13 years (80% v/s 86%).
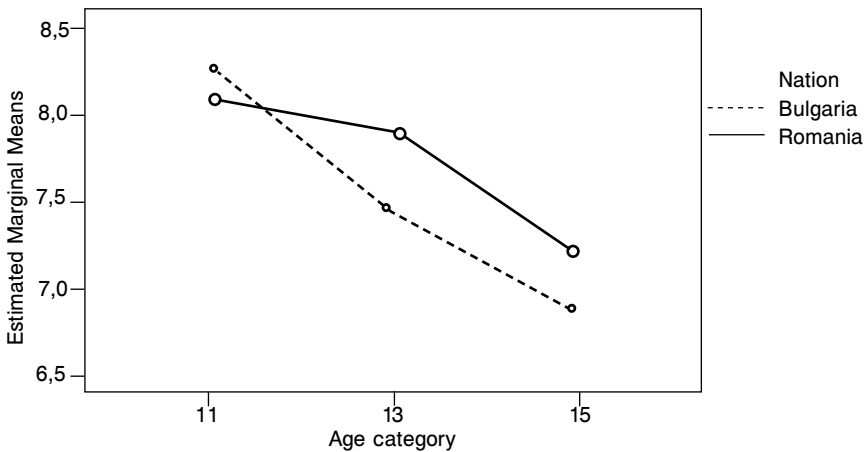
FIGURE 3. Life satisfaction at 11, 13 and 15 years as reported by Bulgarian and Romanian adolescents

Logistic regression models

Logistic regression was used to look at the relative importance of different factors: sex, age, family structure, FAS as an objective measure of family socio-economic status and perceived family wealth as a subjective measure, ease of communication with parents, time spent with friends (not in the self-rated health model), classmate support and school pressure. The analyses were carried out separately for each of the health measures and for each country.

The results from the logistic regression show that all these variables have independent effects on the three positive health measures for both Bulgarian and Romanian data, with the exception of family structure. Some differences are found between the two countries, on the one hand, and comparing the health indicators, on the other (table1).

Family wealth is an important factor in self-rated health, life satisfaction and multiple health complaints. It is measured twofold – with the FAS, as an objective indicator of material possessions, and with the subjectively perceived family wealth by adolescents. *The perceived family wealth* has much greater impact on all health measures: those adolescents that feel their family is not well off are over two to over three times more likely to rate their health as "fair" and "poor" and to report multiple health complaints. The results are quite similar for Bulgaria and Romania. The impact on life satisfaction is even greater – the odds to be unsatisfied with their lives are nine times more for Bulgarian children and 4.5 for Romanian (compared to adolescents who find their families to be "well off").

TABLE 1. LOGISTIC REGRESSION MODELS FOR THE HEALTH INDICATORS

	Bulgaria						Romania					
	Self-rated health		Multiple complaints		Life satisfaction		Self-rated health		Multiple complaints		Life satisfaction	
	Odds ratio	Sig	Odds ratio	Sig	Odds ratio	Sig	Odds ratio	Sig	Odds ratio	Sig	Odds ratio	Sig
Gender: girl (boy)	1.36	.003	1.48	.000	-	-	1.69	.000	1.99	.000	1,44	.000
Age: 13 yrs (11 yrs)	.72	.014	1.29	.003	1.68	.000	.73	.016	00	00.	.67	.001
15 yrs (11 yrs)	.78	.053	1,32	.001	2.16	.000		-	1.24	016	.77	,014
FAS: Medium (low)	.68	.001	-	-	.61	.000	.73	.002	.76	.000	.44	.000
High (low)		-			.58	.000	.63	.006	.77	.023	.35	.000
Perceived wealth average (well off)			-		2.37	.000	1.57	.000			1.79	.000
not well off (well off	1.56	.000	2.06	.000	9.04	.000	3.62	.000	2.50	.000	4.54	.000
	3.42	.000										

Family: (both parents) **single parent** **step family** **foster & other**	1.51 - .052 -	1.51 - .012	-		- 1.67	.03		-	-	.44	.011
Talk with parents: difficult (easy)	1.67	.000	1.77	.000	1.77	.000	1.43	.000	1.70	.000	1.36	.001
Classmate support: Don't agree (agree)	1.52	.000	1.64	.000	1.44	.000	1.56	.001	1.64	.001	1.63	.000
School pressure: pressured (not …)	1.75	.000	1.95	.000	1.84	.000	1.43	.000	2.20	.000	1.20	.044
Time spent with friends: seldom (often)			.87	.045	1.29	.003			.85	.021	1.18	.054

In brackets are given the reference groups; Sig. – significance of the influence; odds ratio – quantitative representation of the factors influencing odds of the studied health indicators

When we look at family affluence *measured by FAS* we could see some differences across countries and health outcomes. It has a moderate impact on self-rated health decreasing the odds for adolescents from families with medium FAS to report "poor" and "fair" health with around 30% for both countries (low FAS is the reference group). For students from families with high FAS from Romania the odds decrease with 37%, for those from Bulgaria it is not significant. Difference concerning the FAS impact is seen in multiple complaints as well. It is not significant for Bulgarian children, for Romanian students from families with medium and high FAS the odds to report multiple complaints decrease about 23-24%. The impact of FAS on life satisfaction is clear for both countries, but more pronounced for Romania: students from families with medium FAS are 39% less likely to feel unsatisfied in Bulgaria and 56% in Romania compared to those with low FAS. The same holds true for students from families with high FAS – 42% for Bulgaria and much more (65%) for Romania are less likely to feel unsatisfied with their lives.

Family structure is a factor that doesn't show a clear independent effect on the studied health indicators with some exceptions: Children who live in a stepfamily in Bulgaria tend to report worse health and more health complaints compared to those living with both parents (the odds increases with 51%). For Romania the situation is somewhat different: more likely to report worse health (odds 67%) are children who live in some other type of family (with grand parents or foster home, etc). Also for children who live in a stepfamily in Romania the odds to feel satisfied with their lives decreases with 56% compared to those living with both parents.

Communication with parents is another important factor: adolescents who have difficulties in talking to their parents about things that bother them are more likely to report "fair" and "poor" health, low life satisfaction (the odds are higher for Bulgarian students) and multiple health complaints.

School pressure is important for health and overall well-being of adolescents: those that feel pressured by schoolwork are twice more likely to report health complaints both in Bulgaria and in Romania. It is an important factor increasing the odds to report worse health and low life satisfaction for Bulgarian adolescents and not the same for Romanian, especially when life satisfaction is concerned.

Classmates'support has also an independent influence on health and life satisfaction: children who do not feel support from their classmates are more likely to report health complaints and "fair" and "poor" health, as well as more low life satisfaction.

Time spent with friends is not a factor with independent influence on adolescents' self-rated health for both countries, some tendency is observed to decrease the odds (with 13-15%) of reporting multiple complaints for children that seldom spend time with friends. Adolescents that often go out with friends are more likely to feel satisfied with their lives in Bulgaria, this doesn't hold for Romania where only a tendency is observed.

Gender has an independent influence on all subjective health measures for Romania – girls are more likely twice to report multiple complaints and their chance to report "fair" and "poor" health and low life satisfaction increases with 69% and 44% respectively. Bulgarian girls are also more likely to report worse health and health complaints but to a lesser extent.

Age has an independent effect on all three measures and for both Bulgarian and Romanian adolescents, the odds ratios being much higher for Bulgarian 13– and 15-year-olds to report low life satisfaction (compared to 11-year-olds).

DISCUSSION

The common tendencies observed in the HBSC studies are clearly demonstrated for both Bulgarian and Romanian adolescents: higher reporting "fair" and "poor" health among older children, an increasing level of subjective health complaints

found from 11 to 15 years especially for girls, a significant decline of life satisfaction (Haugland et al., 2001; Hetland et al., 2002; Cavallo et al., 2006; Currie et al., 2008).

At the same time some differences between the two countries were demonstrated: these tendencies were more pronounced for Romanian adolescents; the most common psychological health complaint for Bulgarian students was irritability, for Romanian – feeling low. Feeling low showed high and quite significant prevalence for Romanian children mostly due to the number of girls that reported this symptom at all ages, and, although to a much smaller extent, to the increasing percent of boys reporting this symptom with age. Bulgarian adolescents become progressively less satisfied with their lives, most pronounced in the transition from 11 to 13, a reversed tendency is observed for Romanian boys of 11 and 13 – greater percent report low life satisfaction at 11 years and less at 13.

The logistic regression models confirmed the patterns identified in the data: Girls and older children, children that perceive their family wealth as average and especially those that perceive it as not well off, children who have difficulties in talking to their parents, children who do not feel strong support from their classmates and those who feel pressured from schoolwork are more likely to report "fair" and "poor" health, multiple health complaints and low life satisfaction. This holds true for both Bulgarian and Romanian adolescents, but some variations in the odds ratios are observed.

Schoolwork pressure has a higher influence on general health and life satisfaction for Bulgarian students, Romanian girls have higher odds to report worse health and multiple health complaints, 13– and 15-year-olds in Bulgaria are much more likely to feel unsatisfied with their lives.

Family socio-economic status as measured by FAS shows definite impact on the studied health indicators for Romanian adolescents – low and medium FAS decrease the OR for reporting good health, satisfaction with life and lack of multiple complaints. It is not so clearly manifested for Bulgarian children, in fact as far as multiple health complaints are concerned no significant association was found at all, and this finding is replicated in the recently published international comparative study (Holstein et al., 2009). However, the authors proved it to be graded and significant when an alternative categorization with a smaller proportion in the low FAS group was applied (including 0-2 instead of 0-3).

The perceived family wealth shows, in line with previous research (Kopp & Rethelyi, 2004; Vasileva et al., 2008), much greater impact on all health measures: the adolescents that feel their family is not well off are 2 to 3 times more likely to rate their health as fair and poor and to report multiple health complaints compared to those who feel their families to be well off; the impact on life satisfaction is even greater, especially for Bulgarian children – the OR is 9 to say they are unsatisfied with their lives, and for the Romanian children the OR is 4.5.

We should say that our results confirm what was issued as "a main pattern" from the recent analyses of the HBSC 2005/06 survey on subjective health of children and adolescents in Europe: older adolescents and girls (especially older girls) and low socioeconomic status are associated with an increased risk for subjective health problems, and this finding was established for nearly all countries (Ravens-Sieberer et al., 2009a).

Family structure is not significantly related to positive health measures, with some exceptions concerning step and foster families, and here differences between the two countries could be seen. Bulgarian children who live in step families show a tendency to report worse health and multiple health complaints, the same holds true for the Romanian students from the similar group only as far as general health is concerned. Romanian students living not with their fathers and/or mothers but in another type of setting (grandparents, neighbours, etc) also are likely to report lower life satisfaction.

In conclusion we could say that almost all studied factors have independent effects on all three positive health measures for both Bulgarian and Romanian data, family and school being the social contexts of adolescents' life with greatest impact. That is why an increased focus on adolescents' social contexts is an important goal in order to improve their health. This is particularly pertinent for Bulgaria and Romania, whose dynamic social, political and economic changes in the past 2 decades have had a negative impact on the health of the whole population and especially of children's health (Bradshaw & Richardson, 2009).

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BEHAVIORAL SLEEP MEDICINE: PROTOTYPE OF CRITICAL ISSUES IN HEALTH PSYCHOLOGY

LINDA BERG-CROSS

Health psychologists believe that optimum health is a complex product of genes, personality, behavior, culture, personal belief systems and the health communities in which we live. Health psychologists are dedicated to understanding and optimizing the many interactions between these psychological and physical factors, with the goal of improving both the quality and length of our lives*. Behavioral sleep psychologists* are a specialized subgroup of health psychologists that focus on how sleep can be improved by manipulating bio-psycho-social-spiritual factors, with the goal of improving a wide range of daytime functioning; including reasoning capacity, reaction time, memory, learning capacity, mood, impulse control, interpersonal skills and physical well being.

There is a large body of evidence to support the efficacy of behavioral sleep medicine interventions for the treatment of chronic insomnia, the focus of this paper. At a meta-level, controversies in the assessment and treatment of chronic insomnia reflect the critical questions facing researchers and clinicians in all areas of contemporary health psychology. The following 7 issues are critical to the study of chronic insomnia[1], but they are also critical to all health psychologists in relation to their own particular health area (be it pain or smoking cessation or weight loss):

1. What are the best ways to make the public aware of sleep problems?

2. What is the best explanatory model to use for sleep problems?

3. What are the best trans-diagnostic techniques to use in insomnia treatments?

4. What are the essential diagnosis-specific techniques to use in insomnia treatments?

5. When co-occurring disorders are bi-directional, where should the clinician intervene?

6. What does it mean to have integrated healthcare in sleep medicine and the treatment of insomnia?

7. What are the competencies needed to treat insomnia?

What are the best ways to make the public aware of sleep problems?

The more we learn about sleep, the more we realize that poor or inadequate sleep is connected to many serious chronic health problems including hypertension and obesity. It affects mood, learning, memory, and decision making skills. Besides the low energy and crankiness of being sleep deprived, the long term effects of chronic insomnia warrant large national public health campaigns to educate the population about the problem and its cures.

The field of health education is inter-disciplinary and draws on public health, media, and psychology. There are four major steps involved in treating any health problem on a national or local level (Awareness, Assessment, Treatment, Compliance). Public awareness begins with media coverage describing the nature and consequences of sleep disorders. Powerful narratives are most often the key to successful mass education. Having celebrities or good storytellers discuss their struggles with insomnia and highlight their successful treatment are essential to "spread the word". One good story is worth countless informational pamphlets. The second step is the inclusion of screening assessments in medical settings. Primary care doctors must view the identification and treatment/referral of such problems as part of their basic mission. The third step involves arousing the patient's motivation to seek treatment for their sleep problem once they have been diagnosed. They need to see the link between their sleep problem and their daytime impairments and believe they can change it. This takes time for the practitioner and an understanding of how motivation to change varies from patient to patient (each stage of change requiring a different medical/psychological approach to move the patient closer to embracing the needed behavioral changes) (Prochaska and DiClemente, 1984). And the fourth step, and often the most difficult, involves patient compliance with the treatment regimen. Once a person is motivated to seek treatment, they may still not be motivated to carry out the, sometimes, difficult and not so pleasant treatment regimens that are the essential core of behavioral sleep medicine.

What is the best explanatory model for sleep problems?

Current conceptualizations of insomnia focus on the bio-psycho-social-spiritual model. At each level of the model, clinicians search for a) *predisposing causes*, such as genetics, an inherently weak sleep generating system, or social or vocational pressures to abandon a preferred sleep routine b) *precipitating causes*, such as backpain, having a newborn infant, or looking for a date for the senior prom, and c) *perpetuating causes*, such as conditioned arousal to what are normally sleep cues and other maladaptive coping behaviors (Spielman et. al. 1987)

It is estimated that about 30% of the population suffers from insomnia (15% from chronic insomnia) and this is the sleep disorder that has received the most attention from behavioral sleep medicine. It accounts for around two thirds

of all sleep disorders. There are two types of insomnia: primary insomnia (PI) and secondary insomnia (SI). Both PI and SI insomnia share various symptomatic expressions: people can have trouble initiating sleep (long sleep onset times), difficulty maintaining sleep (they wake up often during the night); early morning insomnia (short sleepers); and/or non restorative sleep (where they wake up fatigued and sleepy). They both need to show some impairment in daytime functioning to be diagnosed with insomnia (PI or SI) (ISCD-2, 2005). Primary insomnia is diagnosed when there is no other medical condition contributing to the sleep disorder and secondary insomnia is diagnosed if there is a medical or psychiatric condition that may be contributing in part or totally to the insomnia. For example, the engaged 25 year old who develops insomnia a few months before the wedding is likely experiencing primary insomnia; the 25 year old veteran with PTSD is likely experiencing secondary insomnia that is due, in some part, to his medical condition, and a 25 year old with an kidney stone that won't pass is probably experiencing secondary insomnia that is due largely to the medical condition. Both PI and SI can be acute (occurring for less than or equal to a month) or chronic (occurring for more than one month). Behavioral sleep interventions are directed towards chronic forms of insomnia.

While prevalence rates vary enormously according to the criteria used to define primary and secondary insomnia, the best data currently available suggests that 40% of insomnia cases are PI cases and 60% are SI cases (Ford, 1989; Obayon, 1998). The primary medical diagnoses that co-occur in secondary insomnia include mood disorders, restless leg syndrome/periodic limb movement disorder, respiratory disorders, substance abuse, and anxiety disorders (in that order). Psychological disorders account for more than half of all SI (Obayan, 1997) and for most of the patients who present at sleep disorder clinics.

What are the best trans-diagnostic techniques across the different types of insomnia?

There are effective techniques to treat chronic primary insomnia. In the past decade, the same techniques are being used to successfully treat many cases of SI. There are four primary techniques in Cognitive Behavioral Therapy for Insomnia (CBT-I): sleep restriction, stimulus control, relaxation/breathing exercises and cognitive behavior therapy (although in some classical texts (Perlis et. al., 2005), cognitive behavior therapy is a second line intervention; introduced only "as needed", the current paper is focusing, in part, on the need to include CBT as a first line intervention).

Sleep restriction Therapy – This is a behavioral treatment that seeks to improve sleep continuity by increasing the homeostatic sleep drive through partial sleep deprivation. Practically, this means if someone comes in and tells you they are only sleeping four hours a night and they are getting up at 6 am, they are

instructed not to go to bed until 2 am. If that is all they are sleeping, that is all the time they should spend in bed. Once they are going to sleep fairly quickly and sleeping soundly for the four hours, we backtrack the sleep time by 15 minutes at a time until a reasonable sleep time of 7 to 8 hours is achieved.

Stimulus control therapy – This is a behavioral therapy for insomnia that attempts to limit the number of associations that exist for sleep related stimuli. Basically, one wants the bed and its surrounding stimuli to be associated with sleep and only with sleep. This means that if a person has tried to fall asleep for more than 30 minutes and is still awake, they need to get up and get out of the room. They need to sit in the dark, quietly listening to soft music or reading a boring technical book, or just relaxing. When they get tired enough to think they want to go to sleep, they get back into bed. During the initial stages of treatment, people may have to get out of bed 3 or 4 times per night. But the reconditioning does occur – eventually. Sleep therapists often tell clients to only use the bed for sleeping and sex – but of course in these few words is a nest of problems…..and enough for many more papers.

Relaxation Training – Physical and cognitive arousal is diminished by a wide range of relaxation strategies including progressive muscle relaxation, diaphragmatic breathing, biofeedback, and autogenic training. Autogenic training involves focusing attention on various regions of the body and imagining each region feeling warm and/or heavy. This technique is thought to alter blood flow in a way that increases parasympathetic and decreases sympathetic activity. This procedure may also have some utility because of its capacity to derail worry and rumination.

Cognitive Behavior Therapy – This technique involves identifying maladaptive cognitions and beliefs which tend to be automatic and enable the patient to critically evaluate these thought processes. CBT-I has focused on sleep related beliefs, including a) worry about how much sleep ones needs ("I can't function on less than 8 hours sleep), b) worry about the consequences of insomnia ("I look all puffy and ragged, ashamed of the bags under my eyes"), c) upset about the predictability of sleep ("I'm losing control") d) hopelessness ("I'll never get a good night's sleep again") and e) helplessness ("There is nothing I can do to get more sleep") (Morin, 1993). Research has confirmed that people with insomnia indeed hold these beliefs to an extreme degree – it is not necessarily that these beliefs are false but the tenacity and intensity with which one holds these beliefs is dysfunctional.

The CBT-I model is a multi-component therapy model. But, in the reported research, there are programs built around just one, two or three of the interventions. Sleep medicine specialists often leave out one or more components of the full CBT-I program because of time, lack of expertise, or a sense that it is not the critical ingredient in change. So, when one is comparing one study to the next,

even though they label their programs as CBT-I, they may be quite different from one another. Rarely are all four interventions included in the treatment protocol with equal emphases. Choosing which components of CBT-I to include in the treatment protocol depends on which part of the insomnia model one holds to be pivotal. In the case of insomnia, if the clinician thinks hyper-arousal is the key, they will likely focus first on relaxation and behavioral strategies; if the clinician thinks worry and intrusive thoughts are the key, they will likely focus on cognition.

Many of the original studies demonstrating the efficacy of CBT-I for SI omitted a cognitive component. Undoubtedly, this was done because this makes the research much more difficult: it is the most technical, most time consuming, and most individualized of the CBT-I components. While research needs to be done to see if the global mean effect sizes are similar to that for CBT-I for primary insomnia, the gains for CBT-I treatments of SI are significant and vary between .35 and .94. For example, Lichstein et. al (2000) provided the first randomized, waitlist control study to test the efficacy of a four session CBT-I protocol with a variety of SI patients (the most frequent diagnoses were pain conditions such as neuropathy and arthritis). Treatment consisted of relaxation training, stimulus control and sleep hygiene. Fifty seven percent of the treated individuals achieved sleep efficiency criteria for clinically significant improvement compared to 19% of the controls. Two years later, Rybarczyk et. al. (2002) used a CBT-I program for SI patients with coronary artery disease, diabetes, and osteoarthritis. Treatment consisted of a self-help audio recording program based on relaxation therapy, stimulus control, sleep restriction, sleep hygiene and cognitive therapy. Fifty-four percent of those receiving the multi-component treatment met criteria for clinically significant gains compared to 6% of the waitlist. The cognitive therapy, presented via the audio tape, was unable to individualize or interactively dispute any cognitions, and hence it is probably prudent to consider it a minimal cognitive component. Morin et. al. in 1994, with a SI group composed mostly of co-morbid psychiatric disorders and drug dependencies used a treatment that included stimulus control, sleep restriction, sleep hygiene and sedative hypnotic withdrawal. Post treatment, forty percent had sleep continuity values in the normal range. Perlis et. al. (2001) included a cognitive therapy component and found an average improvement of 33% among SI patients with chronic insomnia and a medical or psychiatric co-morbid condition. Note that in this study, although treatment consisted of 8 sessions, anyone who completed four sessions was included in the data and improvement was based only on diary based measures.

Which component of the CBT-I model a therapist believes essential to change has important implications for treatment strategies. If a therapist adheres to only one part of the model, let's say focusing on the physical hyper-arousal and the attending relaxation therapy prescribed for it, trans-diagnostic techniques make a

lot of sense. The same behavioral and relaxation techniques should work across insomnia categories. But if all the components are necessary, or different combinations of the components for different types of PI and SI problems are needed, then people with insomnia need customized components that have been proven essential for change with that type of patient. Hopefully, research will eventually tell us which components work best for which type of clients.

We know the effect size for various CBT-I treatments for primary or secondary insomnia is around .50, indicating that the treatments are moderately effective compared to no treatment controls. This is true whether or not cognitive behavior therapy is employed and irrespective of whether or not sleep hygiene is employed. The *clinical cure rate* in most controlled CBT-I studies indicates that up to 60 to 70% of persons with either PI or SI can be effectively treated, so that their sleep feels restorative and they have minimal daytime impairments. While this is impressive, in a treatment that takes only 8 or so sessions, it still indicates that 30 to 40% of patients do not obtain clinically significant improvements and still have impaired sleep. What are we missing? What other techniques need to be developed to treat this large group of individuals?

Where a trans-diagnostic model proves effective across different diagnostic groups, treatment can be offered to a wider range of patients at a lower cost, due to the the ability to offer group interventions and possibly train less expensive providers on a "one size fits all" intervention. Most facilities do not have the money or expertise to offer individualized treatments by expert therapists. Some many argue that as long as the trans-diagnostic treatments perform better than no treatment, their "evidence based" status means they should be implemented, as is, understanding that a significant minority of patients will not be helped by the intervention. And of course, this is fine unless you or your loved ones are part of the significant minority not helped by the packaged trans-diagnostic treatment protocol. Perhaps the non-responding minority would be helped significantly with the addition of diagnosis specific interventions. We should seek adaptable, individualized protocols so that the largest number of patients can achieve clinically meaningful sleep improvements.

What are the essential diagnosis-specific techniques in behavioral sleep medicine?

In the classic CBT-I paradigm, only sleep related cognitions are targeted initially (and even then as a second line intervention). It seems obvious, though, and research confirms, that worry, rumination, and intrusive thoughts, independent of sleep related cognitions should be targeted for intervention with PI, since the majority of patients with PI spontaneously assert that these cognitions are what is keeping them up at night. Wicklow and Espie (2000) found the following cognitions predominating in individuals with chronic insomnia: a) rehearsal, planning,

problem solving about life events, b) worry about the effects of sleep deprivation, c) reflection on the quality of thoughts "meta-thoughts", d) monitoring arousal status, e) external noise, f) autonomic reactions occurring at the time (heart rate), g) procedural factors, h) and thoughts about rising.

The success rate of CBT-I would undoubtedly improve if all the cognitions that are causing the hyper-arousal are targeted on an individualized basis. In many cases, these will be sleep related cognitions. In many other cases, pressing life events, and/or thoughts focusing on sensory input in the sleep environment will be prominent.

Secondary insomnia may require still more techniques. SI patients also have everyday worry, ruminations and intrusive thoughts that keep them up at night. But they, more prominently, have disease specific concerns that need to be addressed. Someone undergoing chemotherapy is worried about their health outcome, being able to take care of themselves, and dealing with pain and nausea. Most notably, they often confuse their fatigue for sleepiness. Quesnel et. al. (2003), using a multi-component program, targeted cognitions that helped patients differentiate fatigue from sleepiness and found between 71% and 86% of cancer patients receiving such treatment showed clinically significant improvement in sleep at six months. Note this tailored treatment resulted in a better than average response rate for CBT-I interventions. Further validation to the importance of disease specific cognitions is a study by Smith et. al. (2001) that found that pain patients who had increased catastrophic thoughts pertaining to pain and/or thoughts about environmental stimuli prior to falling asleep had more self reported discontinuity in their sleep. These cognitions were more robust predictors of poor sleep than nightly pain severity ratings!

Thus, the role of cognitive interventions may be more complex in SI than in PI, where conditioning factors, and every day worry, ruminations, and intrusions may be the most important perpetuating cognitive factors. In SI, thoughts and stressors associated with the co-occurring illness suggest multiple perpetuating factors, many of which could be altered by cognitive interventions. Targeted interventions for cognitions can include a wide range of techniques including: a) arranging experiments for the patient to test the validity of their belief, b) logical debates and showing contradictions in thoughts, c) distracting imagery and d) gratitude cognitions (Wood et. al., 2009).

Besides for cognitive interventions, research has demonstrated the benefits of light therapy, nutritional changes, exercise, smoking or drinking cessation for chronic insomnia (both PI and SI).

What are the bi-directional influences in co-morbid sleep disorders?

When we are treating secondary insomnia, we want to know if the sleep problem preceded and/or helped precipitate the medical problem or if the medical

problem preceded and/or helped perpetuate the insomnia. The primary question concerning bidirectional influences is "do anxiety and depression provoke or perpetuate insomnia symptoms or does insomnia provoke or perpetuate depression and anxiety? The naive assumption is that if one figured out which one came first, that problem should be the primary focus of treatment. Because A caused B, we assume that if we get rid of A, we will get rid of B. Students of logic will realize this common cognitive error of "affirming the consequent". For example, assume you have been diagnosed with tinnitus and can't get to sleep because of the ringing in your ears. You assume your tinnitus is causing your insomnia and yet, when a doctor finds a cure, your insomnia remains. A (your tinnitus) may have caused B (your insomnia) but resolving B does not necessarily resolve A. Your friend, Harry, has struggled with insomnia for over a year and suddenly last week, his ears starting giving out a strange distracting sound throughout the night. His insomnia (A) might have brought on his tinnitus (B) but it can linger after the insomnia is successfully treated. Sleep problems help initiate a variety of other emotional and physical problems and virtually every emotional and physical problem affects sleep. It is the Mobius Strip effect of sleep/wake disorders. Yet, curing the initiating disorder may or may not resolve the secondary disorder, which can take on a life of its own.

Before exploring the treatment for co-occurring depression and insomnia, let's review the bi-directional relationship of these two disorders. There are three diagnostic classification systems for sleep disorders: the International Classification of Sleep Disorders (ICSD), the Diagnostic and Statistical Manual, 4th edition (DSM-IV), and the International Classification of Diseases, 10th edition (ICD-10). Buysee (1994) found that among 257 patients diagnosed at a sleep clinic (216 insomnia patients and 41 medical/psychiatric patients), „Sleep disorder associated with mood disorder" was the most frequent ICSD primary diagnosis (32.3% of cases); Insomnia related to another mental disorder" (44% of cases) was the most frequent DSM-IV diagnosis and „Insomnia due to emotional causes" (61.9% of cases) was the most frequent ICD-10 diagnosis. When primary and secondary diagnoses were considered, insomnia related to psychiatric disorders was diagnosed in over 75% of sleep disordered patients seen at the sleep clinic.

Depression is the most frequent co-occurring disorder with insomnia. There are over 1,500 published articles have shown a link between depression and sleep (Armitage, 2007). About 20% of patients with insomnia also have a depressive disorder (Mellinger et. al., 1985, Overland et. al., 2008). For patients with restless leg syndrome, major depressive disorder is the most commonly found psychiatric diagnosis with a lifetime and 12-month prevalence of 19.0% and 9.5%, respectively. There is also over a 16% prevalence rate of panic among patients with restless legs syndrome (Westrom et. al., 2008). For patients with obstructive sleep apnea, rates of clinical depression can affect up to 45% of patients (Millman et. al. 1989)! Thus,

somewhere between one in two and one in six patients seen for a sleep disorder, also are suffering from depression and/or anxiety.

There is additional data to suggest that many times, sleep disorders precede and may cause clinical depression. Consider the data. First, patients with insomnia have a fourfold increased relative risk of developing major depression over the course of the next three years. In the shorter time frame, even a two week period of recurrent insomnia is highly predictive of a major depressive episode (Buysse et. al., 2005). Second, data from the Epidemiologic Catchment Area Study indicates that insomnia is associated with an increased risk of depression if it is present at 2 interviews over a 1-year follow-up period (Ford and Kamerow, 1989). Third, Weissman and colleagues (1997), also examining Epidemiologic Catchment Area data found that primary insomnia was associated with a significantly increased risk of developing first-episode major depression, alcohol abuse, and panic disorder within a 1-year follow-up period. Fourth, studies have found insomnia preceding the onset of depression among older adults (Livingston et. al., 1993) and younger adults (Breslau et. al., 1997) with 2– to 3-year follow-up intervals, even after controlling for prior depressive symptoms. Fifth, the severity of post partum depression is related to the severity of insomnia that the new mother is experiencing (Lee, 1998; Chang, 2009). Sixth, suicidal ideation is also directly related to the degree of sleep impairment with which an individual is struggling (Chellappa and Araujo, 2007). Seventh, elderly patients with insomnia and no previous history of depression were 6 times more likely to experience an initial episode of depression than individuals without insomnia (Kamil and Gammack, 2006). Finally, several longitudinal studies using follow-up periods ranging from 1 to 40 years, found that insomnia confers a substantial risk for the development of a depressive disorder (Jansson-Frojmark and Lindblom, 2008).

But the effects are bi-directional. Depression that exists without insomnia is often a ticking bomb for the emergence of a sleep problem. Untreated depression breeds insomnia. Depressed patients with insomnia were over 10 times more likely to be depressed after 6 months than those without insomnia and 17 times more likely to remain depressed after a full year (Katon and Schulberg, 1992).

It appears that anxiety more often precedes insomnia than visa-versa but that once insomnia exists it can provoke or exacerbate anxiety. In a large-scale European population-based study (N=14,915), it was found that in 56.2% of cases, insomnia symptoms preceded symptoms of a mood disorder relapse. In contrast, in chronic insomnia patients with a co-morbid anxiety disorder, the first occurrence of anxiety or a relapse preceded insomnia in most instances.

Much has rightfully been made about the link between depression and sleep disorders. Partly this near exclusive focus on depression is due to the extensive documentation of the bi-directional link between depression and sleep disorders. However, the research is consistent and slowly mounting that anxiety may be even

more prevalent in many sleep disorders. Time will show if anger (and impulsiveness) are also bi-directional with sleep disorders. We know that sleep deprivation provokes both anger and impulsiveness. However, it is unclear how often anger and impulsiveness precede and/or provoke sleep problems.

Research suggests that targeted treatment effects can also be bi-directional in their impact. The road to cure travels both ways: if we treat the depression, then in a large proportion of cases the person's sleep problems may be resolved and if we treat the sleep problem, then the depression may be resolved. It has been estimated that 90% of patients with a depressive disorder have some sleep complaints. Indeed, virtually every measure of depression includes sleep disturbances as a possible defining symptom of the disorder (Berg-Cross, 2009).   While exact statistics are hard to come by, one study found that 56% of depressed individuals with insomnia who were treatment completers resolved their insomnia problem at the same time (44% had a persistent residual problem) (Nierenberg et. al., 1999). On the other hand in a 6 week self help treatment of insomniacs with and without depression, 70% of patients who responded to the insomnia treatment, and were also initially depressed, experienced clinically significant improvements in their depression levels (Morawetz, 2003). Unfortunately, comparisons between these two are fraught with problems since they used different populations. However, it does demonstrate that treatment effects are bi-directional for at least half of patients with co-occurring insomnia and depression. The other half requires more targeted treatments for their remaining symptom logy. Finally, longitudinal studies in subjects with affective disorders show that depressed patients who experience improvements in sleep will also experience a more rapid antidepressant response (Manber et. al., 2003).

The bi-directional relationship between insomnia and mood disorders is likely due to the shared pathophysiological mechanisms that regulate both sleep and mood regulation. Data have shown that both insomnia and depression are related to over-activation of the hypothalamic-pituitary-adrenal (HPA).

In summary, understanding the link between sleep disorders and depression is vital because a) a large number of insomnia patients have some degree of clinical depression b) a bi-directional relationship between depression and insomnia has been verified and c) well established cognitive techniques that are used in the treatment of depression have high potential for being effectively used in the treatment of insomnia.

Thus, research confirms that if you treat insomnia first with CBT-I, many times the depression or affective problems will resolve. That data is the basis on which first wave treatments with CBT-I include only stimulus control, sleep restriction and relaxation. Only "where needed", are second wave treatments used, including focusing on dysfunctional sleep beliefs (Perlis,2005). And again, cognitive-behavioral therapy for insomnia (CBT-I) has focused on dysfunctional sleep

beliefs rather than other interfering ruminations, worries, or interpersonal problems. However, it seems clear to the current author that existing data strongly suggests that improvement rates can be significantly increased if the range of first order treatments are expanded to include a strong cognitive component whenever pre-treatment assessments indicate that they are needed. Still, no studies have examined whether when first order treatments fail, second order treatments are more successful. There is no data on whether first order treatments coupled with second order treatments lead to a quicker or stronger therapeutic response or a more long lasting therapeutic response. Yet, treatment of depression informs us that cognitive and interpersonal interventions, of various sorts, should facilitate the treatment of insomnia in these co-occurring cases since they are highly effective in treating depression (Beck et. al., 1979).

If there is a significant co-occurring affective problem, it is usually unclear if the secondary insomnia is absolute (totally controlled by the primary disorder), partial (some proportion of the insomnia is functionally independent) or specious (insomnia is totally independent and just is co-occurring with another disorder) (Lichstein, McCrae and Wilson, 2003). Clinicians are understandably confused over what would be a potential best practice. Even if the secondary insomnia is absolute, and 100% driven by the depression, it is still possible that the bi-directional symptom cycle is such that treating the insomnia will lessen or ameliorate the depression. Given the multiple points of possible intervention, collaborative decision making, between therapist and client, is the most prudent way to develop an effective intervention.

What are the best models for integrated care in the case of sleep disorders?

There are currently three major models for integrating behavioral health care into primary care settings: the co-location model; the integrated care model, and the consultant model. The co-location model involves a psychologist sharing the physical space with a primary care clinic and perhaps sharing the receptionist and billing personnel. The proximity leads to increased opportunity for referrals and easy communication about how to help particular clients. Psychologists in this capacity provide more traditional mental health services and function as separate entities within the same space (Garcia-Shelton, L., 2006; O'Donohue, Byrd, Cummings, & Henderson, 2005)

The consultant model involves having the psychologist conduct evaluations of patients with the goal of informing the physician of the patient's mental health status and lifestyle issues. This model of primary care psychology evolved from psychologists' involvement with patients seeking medical treatment in the U.S. military and Veteran's Administration Hospitals (Garcia-Shelton, 2006). Referred to as the behavioral health consultant, psychologists incorporate clinical techniques into patients' medical treatment without the use of traditional long-term psychological interventions (Rowan & Runyan, 2005). Psychologists support pri-

mary care providers with decisions about effective treatments, create brief psychological interventions, educate practitioners on mental health issues, and work collaboratively with patients to educate them about self management skills. Sessions are most often shorter than the traditional 50 minutes (more often like 20 minutes) and co-occur at the time of the appointment with the PCP. Here, the psychologist offers brief interventions and typically will see a client 1-6 times.

In the integrated care model, the psychologist is part of the treatment team and may see the patient with the doctor or facilitate family sessions or patient groups. Patients are usually seen on the same day as the doctor sees them. Perhaps the most important feature of the integrated care model is that there is formal and informal communication among the various health providers about a case and that the patient, while treated by various specialists, all are aware of the totality of the person's health issues and various treatments. Medications and behavioral prescriptions work together. Currently, behavioral sleep psychologists serve primarily on integrated care teams. The complexity of behavioral sleep medicine suggests that this is the best model but there have been no studies of comparative effectiveness, to date.

How does cultural competency influence behavioral sleep treatments?

Health psychologists know that treatments that are culture sensitive improve client compliance and are more likely to succeed. While the initial insomnia programs focus on the core trans– diagnostic techniques discussed above, there are exciting new techniques that are being developed by culturally focused sleep therapists.

Take sleep deprivation among new parents. This is a huge problem related to postpartum depression, decreased willingness to nurse, slower recoveries from Cesareans and poor sleep in the infant. Until now, our culture has been hyperfocused on the sleep of the infant. A search on Amazon.com reveals 24,583 book titles on infant and child sleep problems but none(zero) devoted to solely to parental sleep problems (as distinct from adult sleep disorders). Studying the culture of parental sleep reveals that there are deeply wired reactions that prevent new moms and dads from getting adequate sleep.

First, mothers are pre-wired to wake up when they hear their infants' cries. No matter how frustrated and resentful they are about the middle of the night awakenings, it is biologically impossible for most moms to "sleep through" the cries. This is particularly true for nursing mothers, whose let down reflex gets the milk flowing at the sound of the baby's cries.

Second, there is a biological need, not only to wake up, but to actively respond to the infant's cries of hunger and pain. Because babies wake to feed every three hours for the first few months of life, parents get up multiple times a night. For many babies, learning to sleep through the night takes a year or more. This pa-

rental sleep deprivation seeds personality changes. Many partners fall into a sleep fog trying to regain a steady footing each day. Third, the plummeting levels of estrogen and progesterone lead to less stable sleep patterns in new moms. Fourth, episiotomies, engorged breasts and seemingly endless other annoying physical reactions can create pain and discomfort that interferes with many mothers' sleep.

There are two psychological contributors to parental sleep deprivation: anxiety and depression. Parenting is a complicated event. Mothers and fathers worry if they are being a "good enough" parent. It is stressful learning what to do, how to do it and when to do it. It can become all consuming. Often, no matter what path one chooses, the new partner still worries that they made the wrong choice. For example, a parent could think that a "good parent" would walk their baby outside every day to get fresh air. Walking the baby outside in the fresh air, they may begin to question if a really "good parent" would keep their infant inside so she/he doesn't get exposed to germs. Parental worries are a treadmill of moving targets of concern. The more one worries, the more one finds new objects of worry.

Parents also worry whether their child is developing normally and/or how to treat the baby's problems. Every child's development is unique and parents are often confused about what is normal and what is abnormal. Because it is difficult to find answers to these questions many times, constant vigilance and worry take hold.

Finally, parents ruminate about how they are going to survive the isolation and constant frustrations. They miss being able to work out, talk on the phone, take a leisurely shower. They miss the freedom of getting in the car when needed to go to the supermarket. The despair of losing one's freedom is added to whatever basket of worries they carried to bed prior to having a baby.

Behavioral sleep medicine has much to offer new parents to insure that they sleep better and worry less. The SOS program (Sliding Schedules – On Call Sleep – Sustained Sleep) is a culturally attuned parent-centered sleep program for new parents. It relies on applying evidence based practices in behavioral sleep medicine to the culture of new parents. It has three major techniques: a) Sliding sleep schedules, where there is a two hour difference between when each parent goes to sleep and gets up; b) on-call sleep periods for each parent, such that each parent must be on call for two of their eight hour sleep shifts, and c) sustained sleep periods such that each person is guaranteed six hours of uninterrupted sleep per night . Naps, nursing, and preferred sleep routines are taken into account (readers interested in obtaining the complete program should email the author) (Berg-Cross, 2009).

Many other culture groups are getting specialized programs. For example, the Veterans Administration is exploring developing veteran focused dysfunctional beliefs scales that can help in the treatment of PTSD sleep problems in Iraqi war veterans. Of course all the specialized cognitive programs for SI are examples of culturally structured programs, as well.

What are the competencies needed to treat insomnia?

Sleep medicine is undoubtedly one of the most inter-disciplinary of all medical fields, drawing primarily from pulmonary, neurology, pediatrics, and the psychiatric sub specialties. Most sleep clinics do not have a behavioral sleep psychologist affiliated with them, although the need is great. This is due, primarily, to the nascent nature of the field, with only 132 nationally certified behavioral sleep specialists, many of whom are not psychologists, but psychiatric nurses, psychiatrists, or other human service providers. Because of the paucity of certified psychologists, the American Board of Behavioral Sleep Medicine (ABBSM) currently allows anyone certified in sleep medicine to supervise a psychologist, enabling psychologists to easily gain the required 500 to 1000 hours of supervised experience (the number of hours dependent upon prior experience with behavioral medicine). Other requirements include a series of academic courses acquired at the university or through continuing education, and passing a national examination.

Adding a behavioral health specialty to a general clinical psychology practice is not a career change but it is a *job* change that involves acquiring new skills and needs within the profession. It is retraining and it takes commitment, financial sacrifices, and time. Re-tooling one's practice mid-career is probably similar to other mid career job changes where it is estimated to take 3 years, on average, to complete the transition from one professional practice or identity to another.

Many psychologists will undoubtedly practice behavioral sleep medicine without certification just as many engage in other areas of health psychology without certification. While it is over a decade since the American Psychological Association (APA) formally recognized clinical health psychology as a distinct specialty, most psychologists providing services in these areas are not board certified in health psychology. Nor does recognition of a specialty by APA limit any psychologist from practicing within the scope of his or her area of competence. American psychologists are guided by the APA ***ethical*** standards regarding "boundaries of competence" (APA, 1992, Standard 1.04):

Psychologists provide services only within the boundaries of their competence, based on their education, training, supervised experience, or appropriate professional experience. Psychologists provide services in new areas or involving new techniques only after first undertaking appropriate study, training, supervision, and/or consultation from persons who are competent in those areas or techniques. In those emerging areas in which generally recognized standards for preparatory training do not yet exist, psychologists nevertheless take reasonable steps to ensure the competence of their work and to protect patients ... [and] clients ... from harm.

How do they know when they are competent to treat ? Belar (2003) has developed a template for self assessment of readiness to deliver services to patients with general medical problems but the template of self assessment questions applies equally to those wanting to treat sleep disorders.

Clinicians need to assess themselves in the following domains:

- Do I have knowledge of the biological bases of health and disease as related to this problem? How is this related to the biological bases of behavior?
- Do I have knowledge of the cognitive-affective bases of health and disease as related to this problem? How is this related to the cognitive-affective bases of behavior?
- Do I have knowledge of the social bases of health and disease as related to this problem? How is this related to the social bases of behavior?
- Do I have knowledge of the developmental of health and disease as related to this problem? How is this related to the developmental bases of behavior?
- Do I have knowledge of the interactions among biological, cognitive-affective bases, social and developmental components (e.g. the psychophysiological components)? Do I understand the relationship the relationships between this problem and the patient and his/her environment (including family, healthcare system and socio-cultural environment)?
- Do I have knowledge and skills of the empirically supported clinical assessment methods for this problem?
- Do I have knowledge and skills of the empirically supported clinical assessment methods for this problem? Do I have knowledge of how the proposed psychological intervention might impact physiological processes and visa-versa?
- Do I have knowledge of the roles and functions of other health care professionals relevant to this patient's problem? Do I have skills to communicate and collaborate with them?
- Do I understand the sociopolitical features of the health care delivery system that can impact this problem?
- Do I understand the health policy issues relevant to this problem?
- Am I aware of the distinctive ethical issues related to practice with this problem?
- Am I aware of the distinctive legal issues related to practice with this problem?
- Am I aware of the special professional issues associated with practice with this problem?

The sleep medicine field needs clinicians with all types of backgrounds to meet the dire need for services, innovative research and education. Here's hoping some of you will join us!

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RISK BEHAVIORS OF THE BULGARIAN SCHOOL-AGED CHILDREN: FAMILY PREDICTORS AND DETERMINANTS

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Abstract. We study the link between family settings and the prevalence of risk behaviors such as smoking, drinking, cannabis use, early sexual experience, aggression towards schoolmates, unhealthy eating habits and reduced physical activity among Bulgarian school-children at age of 13 or 15. The analysis is based on data from the Bulgarian sample of the HBSC 2005/6. We present descriptive statistics of the main risk behaviors, as well as the main characteristics of the children's family setting. We run logistic regressions separately for the different types of risk behaviors and test the impact of structure of family and its socio-economic status, parents-children communication, parental monitoring and supervision and satisfaction with family life. Controls for various characteristics (gender, age, place of residence) are also included in the models. The main results show that the children living in non-complete families in Bulgaria have higher odds for smoking, drinking, early sexual debut and aggressiveness towards the others. Social support, close relations with the parents and the high satisfaction from family life prevent the children from exhibiting behaviors that put at risk their health and wellbeing. Thus, we conclude that deficits in the family communication and functioning prove to be main predictors for children's risk behaviors.

Keywords: Health Behaviour in School-aged Children (HBSC), adolescence, risky health behaviors, family communication, family affluence (FAS), regression models, interaction models

INTRODUCTION

The aim of this study is to reveal the role of family setting on prevalence of adolescents' risky health behaviors. Many health-impairing behaviors such as smoking, drinking, drug use, unhealthy eating establish during the teenage years. We suppose that family connectedness and strong attachment of children to their parents are less likely to provoke adolescents' delinquent and risky health behaviors and more likely to incite healthy habits.

Our analysis is based on the Bulgarian data from the Health Behavior in School-aged Children (HBSC), wave 2006. HBSC is a cross-national research study conducted in collaboration with the WHO Regional Office for Europe. The target population of the HBSC study is young people attending school, aged 11, 13 and 15 years old. These age groups represent the onset of adolescence, the challenge of physical and emotional changes, and the middle years when important life and career decisions are beginning to be made. In Bulgaria the survey was carried out in March 2006 through self-completion questionnaires administered in the classroom. The national representative sample consists of 4854 school aged children: 5th grade (n=1586), 7th grade (n=1580) and 9th grade (n=1688). We limit our analysis of risk behaviors to a sub-sample of students at age of 13 and 15. We choose these ages because they represent the onset of adolescence as a stage of personal development in which many health-related behaviors develop.

METHODOLOGY

We start with descriptive statistics of the main characteristics of adolescents' family setting and the frequencies of adolescents' risky behaviors such as excessive smoking and drinking, drug use, aggressiveness at school, unhealthy eating and reduced physical activity. Further we run several logistic regression models for different types of risk behaviors estimating **main effects** of demographic and family-related variables. Additionally, we estimate models measuring **interaction effects** between some objective and subjective characteristics of family.

Dependant variables

In the regression models our dependant variables are constructed in the following way:

- ⚕ In terms of **smoking** – risky behavior is defined as smoking a cigarette at least once a week. 13.2% from the 13 years old students and 37.5% from the 15 years old students smoke at least once a week
- ⚕ **Drinking** is created as a composite measure that includes drinking at least once a week of any type of alcohol like beer, wine, spirits, alcopops or other alcoholic drinks. 23% from the sample of the 13 years old

students and 38.7% from the sample of the 15 years old students drink alcohol at least once a week.

- ⚜ We consider also as a risky group those children who reported that they had used **marihuana** in the last 12 months preceding the survey. 13.3% from 15 years old children reported experience with cannabis in the last 12 months.
- ⚜ **Risky sexual behavior** is defined as a presence of sexual experience reported by the adolescents. In this case as in the case of cannabis use the analysis is limited only to the students who are 15 years old. 38.3% from the 15 year olds reported having had sexual intercourse.
- ⚜ **Aggressiveness towards schoolmates** is defined as bullying and insulting other children at school that varies from several times a week to 2-3 times a month. 37.5% from the 13 year olds and 28.6% from the 15 years olds often bully their schoolmates.
- ⚜ The next model estimates the risk of **unhealthy eating.** Unhealthy eating is defined as consumption of vegetables and fruits less than 5 times a week or never. 64.5% from 13 year olds and 72.4% from the 15 year olds eat fruits and vegetables less than 5 times a week or never.
- ⚜ The last model estimates the risk of **reduced physical activity.** Reduced physical activity is defined as doing exercises once a week, once a month, less than once a month or never. 36% from 13 years old students and 40.7% from 15 years old students do exercises once a week, once a month, less than once a month or never.

Independent variables

The **independent variables** are demographic characteristics like gender and age of the children and **FAMILY-related** variables. The latter are divided into **objective characteristics** and **subjective experience** in family as predictors of children's risky behaviors.

Here we distinguish several **objective characteristics** of family like:

- ⚜ **family type** – we distinguish between intact family (based on the presence of both parents in family) versus incomplete family (including single parent family, step family and other cases like institutional care). In the Bulgarian sample 81% of all children live in family with both parents and 19% of them live in incomplete families.
- ⚜ Social-economic status of family constructed by the so-called **family affluence scale (FAS).** This indicator is based on various types of material possessions of family such as owing a car, computer, having one's own bedroom and times traveling away on holiday with the family during the last 12 months. Based on combination of these items a three-point ordinal scale measuring family affluence has been created: FAS 1: low affluence; FAS 2: medium affluence; FAS 3: high affluence families.

Another set of family-related variables reflects **the children's subjective experience in family**. This experience is measured by the children's satisfaction with the relations in family; type of communication with mother and father – if it is easy or difficult for the children to discuss problems with parents; parents' involvement and interest in children's school matters and their readiness for help in case of problems at school. Additionally, we include a composite measure of family activities done by the family members together such as watching TV together; eating meals together; visiting places and visiting guests and sitting and talking in family.

We also test the effect of some other variables such as frequency of the contacts with peers measured by evenings spent outside home with friends and also the students' academic achievements.

RESULTS

The main results from logistic regression models on the risks of smoking, drinking, cannabis use, early sexual experience, aggressiveness towards schoolmates, unhealthy food habits and reduced physical activity among Bulgarian students are showed on Table 1.

TABLE 1. LOGISTIC REGRESSION MODELS PREDICTING THE ODDS OF SMOKING, DRINKING, CANNABIS USE, EARLY SEXUAL EXPERIENCE, BULLYING SCHOOLMATES, HEALTHY EATING AND PHYSICAL ACTIVITY. BULGARIAN SCHOOL-CHILDREN AGED 13 AND 15.

Variables	Smoking		Drinking		Cannabis use*		Sexual experience*		Bulling others		Healthy eating		Physical activity	
	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.	Odds Ratio	Sig.
Age														
13 y.o.	0,28	***	0,52	***					1,64	***	1,25	**	1,25	**
15 y.o. (ref.)	1		1						1		1		1	
Gender														
Male	0,57	***	1,48	***	0,95		1,97	***	1,82	***	0,68	***	2,16	***
Female (ref.)	1		1		1		1		1		1		1	
Family type														
Intact	0,68	***	0,90		0,66	**	0,53	***	0,83	*	1,03		0,86	
Incomplete (ref.)	1		1		1		1		1		1		1	

Family affluence scale													
Low	0,72	**	0,47	***	0,32	***	0,49	***	0,55	***	0,43	***	0,83	*
Medium	0,78	*	0,67	***	0,49	***	0,63	**	0,75	**	0,66	***	0,88	
High (ref.)	1		1		1		1		1		1		1	
Satisfied from the relations in family (continuous)	0,68	***	0,92	***	0,90	**	0,965		0,95	**	1,13	***	1,02	
Communication with mother													
Easy	0,75	**	0,71	**	0,64	**	1,21		0,87		0,87		0,94	
Difficult (ref.)	1		1		1		1		1		1		1	
Communication with father													
Easy	0,77	**	1,11		0,76		0,79	*	0,88		1,15		1,09	
Difficult (ref.)	1		1		1		1		1		1		1	
Problems at school – parents help													
Yes	1,03		0,61	***	0,91		0,79		0,80		1,05		1,01	
Neither/not	0,94		0,53	**	0,66		0,03		0,66	**	0,91		0,99	
No (ref.)	1		1		1		1		1		1		1	
Family activities													
Rarely doing things together	1,02		1,30	*	1,30		1,58	**	1,10		0,79		0,86	
Often doing things together (ref.)	1		1		1		1		1		1		1	
Evenings spent with friends													
Rare	0,20	***	0,32	***	0,29	***	0,25	***	0,64	***	0,85		0,77	**

Often	0,48	***	0,60	***	0,50	***	0,47	***	0,81	**	0,78	**	1,05	
Every evening (ref.)	1		1		1		1		1		1		1	
Aca-demic achieve-ments														
Good	0,46	***	0,81	**	0,52	***	0,76	**	0,76	***	1,51	***	1,44	***
Bad (ref.)	1		1		1		1		1		1		1	
Con-stant	0,01		6,37	***	3,63	**	4,289	***	1,498	*	0,25	***	0,96	

Source: authors' own estimations based on HBSC, 2006 – Bulgaria.
Notes:
1) *** p≤0.01; ** 0.01<p≤0.05; * 0.05<p≤0.10
2) ^ – 15 y.o. children only.

As a next step in our analysis we run several models that include interaction effects between some objective and subjective characteristics of family. We choose to interact variables that have strong and significant separate effects on almost all kinds of risk behaviors. These variables are socio-economic status of family (FAS) and satisfaction with family life. The results are presented in Figures 1-6.
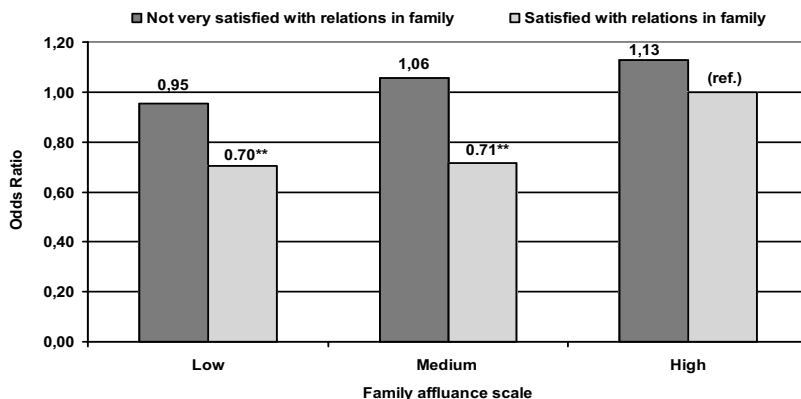
FIGURE 1. Odds of Smoking. Interaction between Satisfaction with Family Relations and FAS. Bulgarian school-children aged 13 and 15.
Source: authors' own estimations based on HBSC, 2006 – Bulgaria.
Notes:
1) *** p≤0.01; ** 0.01<p≤0.05; * 0.05<p≤0.10
2) Controlled for: children's age, gender, family structure, communication with mother/father, parents readiness for help at school, family activities, evenings spent with friends and students' academic achievements.
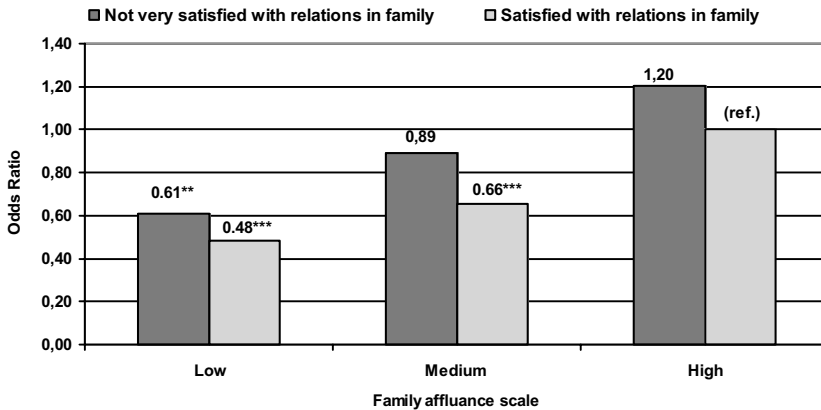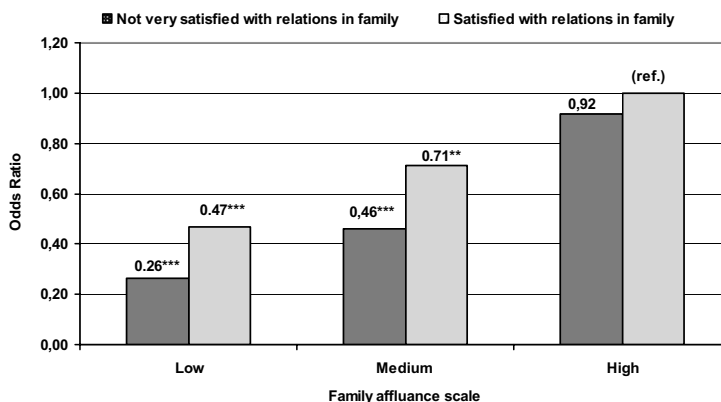
FIGURE 2. Odds of Drinking. Interaction between Satisfaction with Family Relations and FAS. Bulgarian school-children aged 13 and 15.
Source: authors' own estimations based on HBSC, 2006 – Bulgaria.
Notes:
1) *** p≤0.01; ** 0.01<p≤0.05; * 0.05<p≤0.10
2) Controlled for: children's age, gender, family structure, communication with mother/father, parents readiness for help at school, family activities, evenings spent with friends and students' academic achievements.
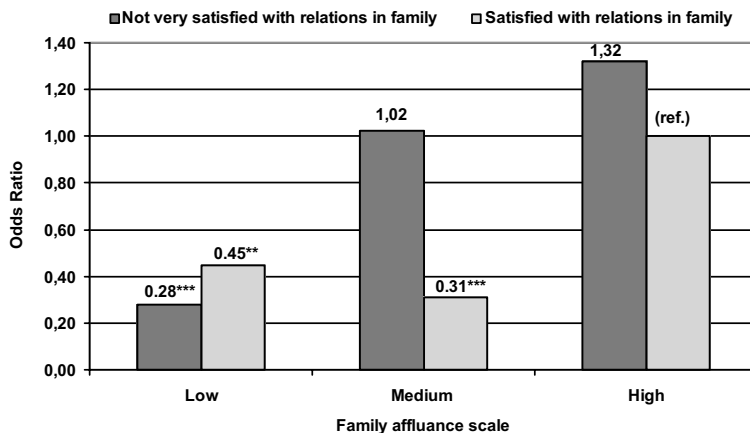
FIGURE 3. Odds of Cannabis Use. Interaction between Satisfaction with Family Relations and FAS. Bulgarian school-children aged 15.
Source: authors' own estimations based on HBSC, 2006 – Bulgaria.
Notes:
1) *** p≤0.01; ** 0.01<p≤0.05; * 0.05<p≤0.10
2) Controlled for: gender, family structure, communication with mother/father, parents readiness for help at school, family activities, evenings spent with friends and students' academic achievements.
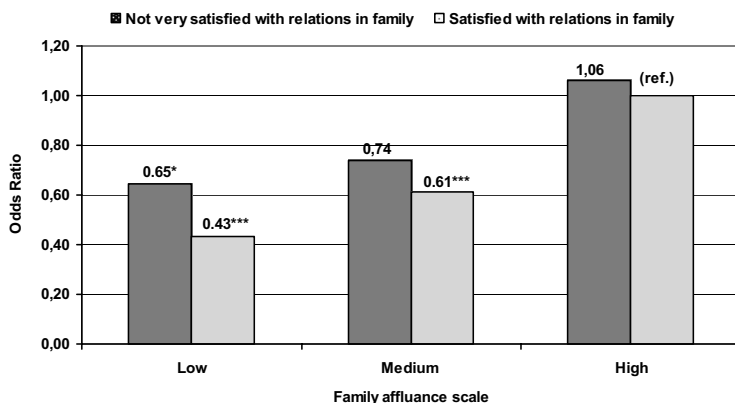
FIGURE 4. Odds of Early Sexual Experience. Interaction between Satisfaction with Family Relations and FAS. Bulgarian school-children aged 15.
Source: authors' own estimations based on HBSC, 2006 – Bulgaria.
Notes:
1) *** p≤0.01; ** 0.01<p≤0.05; * 0.05<p≤0.10
2) Controlled for: gender, family structure, communication with mother/father, parents readiness for help at school, family activities, evenings spent with friends and students' academic achievements.
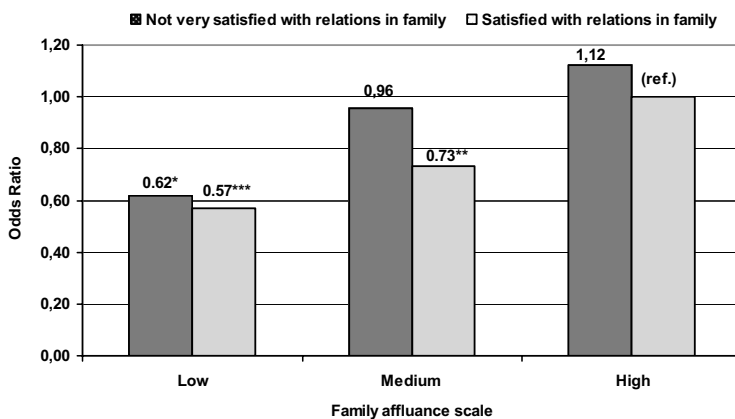
FIGURE 5. Odds of Bullying School-mates. Interaction between Satisfaction with Family Relations and FAS. Bulgarian school-children aged 13 and 15.
Source: authors' own estimations based on HBSC, 2006 – Bulgaria.
Notes:
1) *** p≤0.01; ** 0.01<p≤0.05; * 0.05<p≤0.10
2) Controlled for: children's age, gender, family structure, communication with mother/father, parents readiness for help at school, family activities, evenings spent with friends and students' academic achievements.

FIGURE 6. Odds of Healthy Eating. Interaction between Satisfaction with Family Relations and FAS. Bulgarian school-children aged 13 and 15.
Source: authors' own estimations based on HBSC, 2006 – Bulgaria.
Notes:
1) *** $p \leq 0.01$; ** $0.01 < p \leq 0.05$; * $0.05 < p \leq 0.10$
2) Controlled for: children's age, gender, family structure, communication with mother/father, parents readiness for help at school, family activities, evenings spent with friends and students' academic achievements.

DISCUSSION

The results of the models show that **age is a strong predictor** of all types of risk behaviors. Risk increases with age. In particular, the 13 years old students have lower risk of smoking and drinking. They are also more likely to have healthy eating diet and be physically more active in comparison to the 15 years old students. Only in the case of the **risk of higher aggressiveness at school** we observe a **reversed relation**. In particular, the smaller children are more likely to report higher aggressiveness towards their school-mates than the 15 years old boys and girls.

　　　Gender is also a source of important differentials in the risk behaviors of the Bulgarian school-aged children. The results reveal that in general boys are more prone to demonstrate risk behaviors compared to girls. In case of drinking, early sexual experience and bulling others at school the risk for boys is higher than the risk for girls. Boys are also less likely to have healthy eating habits than girls. Only in the case of smoking and reduced physical activity the risk is higher for girls. Boys are less likely to smoke regularly compared to girls. Boys are two times more likely to be physically active than girls.

The next two variables reflect the **influence of family settings**. The results of our models confirm that children who grow up in families with both parents are less likely to smoke, use marihuana, to have an early start of sexual life or bully their school-mates compared to children who are raised in incomplete families. No significant associations are found between the odds for healthy eating and physical activity and family type.

It comes out from our study that **material status of family is very important predictor** of adolescents' risk behaviors. We find a **strong association** between all kinds of risk behaviors and the socio-economic status of family. Only in the case of physical activity the impact is somewhat weaker. In particular, children from poor and medium-status families in the country are less likely to smoke, drink, use cannabis, have an early start of sexual life or bully others at school. Not surprisingly, the influence of socio-economic status is also very strong in the case of healthy eating. The results show that in Bulgaria the poor children and the children who come from medium-status families have unhealthier diet in comparison to the children from well-off families. Children from poor families are also more prone to sedentary behaviors.

How can we interpret the empirical finding that children raised in well-off families in Bulgaria are more likely to exhibit behaviors that put at risk their health and wellbeing? We suppose that risky behaviors are often misinterpreted by the teenagers as manifestations of maturity, independence and superior material position with respect to others.

The next set of factors that we study reflects the influence of indicators measuring children's subjective experience in family.

The results from the models show that higher satisfaction with the relations in family reduces the risk of smoking, drinking, cannabis use and higher aggressiveness at school. Those children who are in close relations with their parents and easily communicate and share problems with them, especially with the mother, are less likely to regularly smoke, drink or use marihuana. Parents' involvement and interest in children's school problems and their readiness to help has a strong preventive effect on the risk of alcohol consumption. Family activities have some influence but it is quite moderate. However, children who report that they rarely do things with their families have higher odds of drinking and early sexual start compared to children who often do things together with their parents. Thus, the results from the models confirm that **satisfaction with family life and close relations with parents** have positive influence and promote healthier life-styles among Bulgarian adolescents.

The next set of variables we include in the models show that students who rarely go out with friends in the evenings are less likely to report any kind of risk behaviors.

And finally, the students with good grades have lower risk of health impairing behaviors.

The results from the **interaction models** show that the risk of smoking, drinking and cannabis use is significantly lower for the students from medium status and poor families who are satisfied with the relations in their families compared to the risk of the reference group (satisfied children from well-off families) (Fig.1-3).

Additionally, the satisfied children from low and medium-status families are also less likely to have an early start of sexual life and also less likely to report higher aggressiveness towards others at school (Fig.4-5). In the case of healthy eating a reversed relation holds true. Here the reduction of the socio-economic status and the parallel reduction of children's satisfaction with family relations are associated with a **strong and significant decrease** in the risk of healthy eating (Fig.6). In this case on the extreme are the unsatisfied children from poor families who have the **lowest odds for healthy eating** in contrast to the rich satisfied children.

CONCLUSIONS

During the last 20 years family institution in Central and Eastern Europe has been experiencing serious transformations. State support to families and children during the previous socialist times has been replaced by to other priorities that caused financial and social burden over family institution. Additionally, during adolescence family loses its main influence over child's development and encounters confrontation from competing environments like peers, electronic types of communications and media. Nevertheless, we assume that family as a structural and emotional entity plays a crucial role in social, psychological and health development of children.

The Bulgarian data from HBSC'2006 confirm strong associations between family settings and adolescents' health-impairing and risky behaviors. The students who develop health impairing behaviors often grow up in so-called **risky families** that face problems with connectedness between family members. These problems can be related to low satisfaction of children with the relations between family members, impaired or absent communication with parents, especially with mother, less interest of parents in problems their children face at school, lack or insufficient family activities done by the family members together.

Furthermore, the presence of both parents at home has a preventive effect on children's behaviors and habits related to health.

One of the most important conclusions from our data is about the strong effect of social-economic status of family on adolescents' health behaviors. When controlling for the influence of other factors, family affluence remains strong and significant predictor of Bulgarian children's risk behaviors. We observe that the

children from the well-off families are more likely to drink, use cannabis, bully others at school or have an early start of sexual life, **whereas** the children from poorer families are more likely to have unhealthy diet and reduced physical activity. We can conclude that the students from the rich families constitute the riskiest group in this country in terms of health impairing behaviors. This situation is quite similar to that observed in other East European countries and **opposite to that found in the western countries** where children raised in poor families tend to be the riskiest group.

Finally, we can point out some practical implications from our empirical findings. First, we focus on the necessity of **responsible parenting** that prevents children from substance abuse and unhealthy habits. Second, we emphasize the necessity of **psychological counseling** of parents from risky families how to prevent the risk behaviors of their children.

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RISKY HEALTH RELATED BEHAVIORS AND RELIGIOSITY IN AMERICAN AND ROMANIAN UNDERGRADUATE COLLEGE STUDENTS

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Abstract. *The study focused on the relationship between intrinsic/extrinsic religiosity and a variety of risky health related behaviors in American and Romanian college students. Intrinsic and Extrinsic Religiosity were measured using the Allport and Ross scale (1967) Risky health related behaviors were assessed by the Center for Disease Control and Prevention (CDC) Youth Risk Behavior Surveillance System (YRBSS, 2003) Participants for the study were 233 American and Romanian undergraduate male and female college students. In both countries, the questionnaires were administered in the spring of 2009. The intrinsic rather than the extrinsic religiosity was protective against certain types of risky health related behaviors. Religiosity was inversely correlated with risky sexual behaviors, smoking habits, and alcohol consumption. Differences in the pattern of interactions between intrinsic/extrinsic religiosity and risky behaviors in the American versus Romanian students are presented in the paper. The strength of correlation between religiosity and health-related behaviors was found to be similar in the samples from the two countries.*

Keywords: *risky health behaviors; religiosity; college students; comparative study*

INTRODUCTION

Center for Disease Control (CDC) reported that risky health behavior among youth was a major contributor to their morbidity, social problems and even early mortality (Brener, et al. 2004). Included accidental injuries were: violence, tobacco use, alcohol and other drug use, sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, unhealthy dietary behaviors, physical inactivity and excessive weight gain.

Researchers found a relationship between a person's depth of religious conviction and risky behavior. Studies have indicated that religion is important to adolescents; usually, youth perceive religion as important and are active in religious worship and activities. Furthermore, religiosity is considered a protective factor against a series of negative health related behaviors in the areas of smoking, alcohol use, truancy, sexual activity, marijuana use, and depression (Goggin, Murray, Malcarne, Brown & Wallston, 2007; Patterson & Sedlacek, 1983; Poulson et al., 1998; Rowatt & Schmitt, 2003).

The present study focused on the relationship between intrinsic/extrinsic religiosity and a variety of risky health related behaviors in American and Romanian college students. The objective of this study was to explore the relationships between religiosity and risky health behaviors in two different cultures. We expected that religiosity is a protective factor against certain risky health behaviors. We also expected that its influence is mediated by type of religiosity (extrinsic vs. intrinsic), gender, and cultural milieu.

METHODOLOGY

PARTICIPANTS AND MATERIALS

Participants to the study were 233 American and Romanian undergraduate volunteers, males and females that enrolled in Psychology classes at the University of Virginia's College at Wise and University of Bucharest. Only the participants between ages of 18-21 were retained, so the following analysis was done on 81 American and 141 Romanian students.

Materials used for the study were: Youth Risk Behavior Survey (YRBSS, CDC, 2003) and Religious Orientation Scale (Allport & Ross, 1967). All questionnaires were administered in the spring of 2009. An anonymous in class survey was used.

STATISTICAL ANALYSIS

Participants were divided into high versus low extrinsic and intrinsic religiosity groups by computing the individual's z score within each country group. A multivariate analysis of variance was applied. Dependent variables were the levels of risky behaviors, as estimated by YRBS scores. Independent variables (factors) were: Intrinsic Religiosity (high vs. low), Extrinsic Religiosity (high vs. low), Country (USA vs. Romania), and Sex. Age was a covariate.

RESULTS

Multivariate analysis revealed significant effects for Country, Sex, the interaction between Country and Sex, and for the interaction between Country and Extrinsic Religiosity (Table 1).

TABLE 1. SIGNIFICANT MULTIVARIATE EFFECTS

Source	Wilks' Lambda	F(12,194)	p	multivariate eta sq.
Country	.41	22.54	<.001	.58
Sex	.77	4.58	<.001	.22
Country * Sex	.88	2.16	.01	.11
Country * Extrinsic Religiosity	.89	1.89	.03	.10

Performing the univariate analyses, a series of significant differences between Romanian and American college students and males and females were revealed. Romanian college students adopt riskier behaviors regarding safety, violence, suicidal ideation and behavior, and tobacco and alcohol consumption. In contrast, American college students had significantly worse scores regarding food and physical exercise (Table 2).

TABLE 2. SIGNIFICANT UNIVARIATE EFFECTS (SOURCE: COUNTRY)

Dependent variable	mean USA	mean RO	F	p	eta sq.
Safety	1.35	2.02*	44.30	<.001	.17
Violence	1.03	1.30*	5.16	.02	.02
Suicide	.51	1.61*	108.21	<.001	.34
Tobacco	1.47	1.96*	14.50	<.001	.06
Drugs	.74	1.09*	9.44	.002	.04
Food	1.62*	1.93	5.97	.01	.02
Physical	1.96*	2.34	5.89	.01	.02

Note: asterisk means worse

Irrespective of nationality, males adopt riskier behaviors regarding violence and tobacco and alcohol consumption. In contrast, females had significantly worse scores regarding physical exercise (Table 3).

TABLE 3. SIGNIFICANT UNIVARIATE EFFECTS (SOURCE: SEX)

Dependent variable	Mean Female	Mean Male	F	p	eta sq.
Violence	.87	1.46*	24.48	<.001	.10
Tobacco	1.56	1.87*	6.10	.01	.02
Alcohol	1.76	2.04*	4.44	.03	.02
Physical	1.85*	2.45	15.92	<.001	.07

Note: asterisk means worse

The interaction between Country and Sex had significant effects on violence (F = 8.91; p = .003; eta sq. = .04) and eating habits (F = 4.45; p = .03; eta sq. = .02). Regarding violence, Romanian females tend to have higher scores on violence than US females. There was no difference for males. Regarding eating behaviors, US females had riskier eating behaviors than Romanian females. There was no difference for males (Figure 1a, b).

(a)   (b)
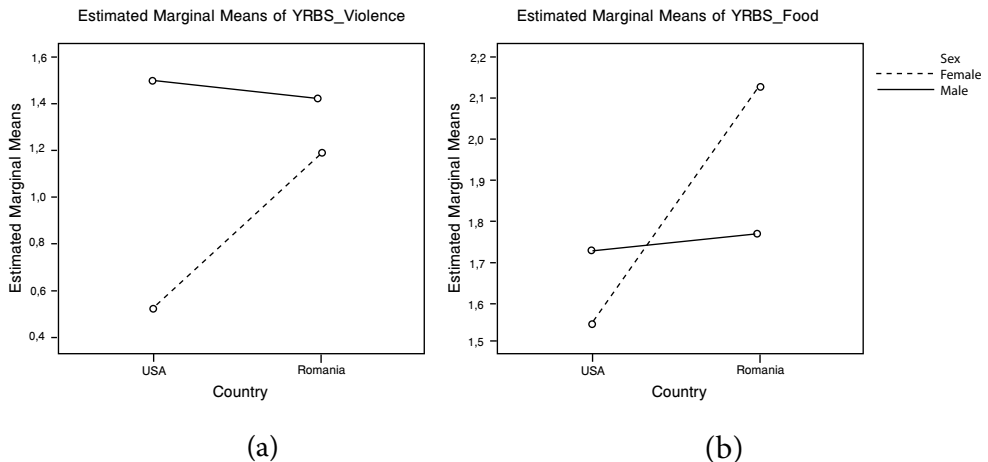
FIGURE 1. Effect of Country * Sex Interaction on Violence (A) and Food (B)

As expected, Religiosity did not generate main effects, but there were significant effects of the interactions between Country and Extrinsic Religiosity on tobacco use and physical exercise, Sex and Extrinsic Religiosity on physical exercise, Intrinsic and Extrinsic Religiosity on marijuana use, and Country and Intrinsic and Extrinsic Religiosity on suicidal ideation and behaviors (Table 4).

TABLE 4. INTERACTIONS

Source	Dep. var.	F	p	eta sq.
Country * Ext Rel	Tobacco	8.54	.004	.04
	Physical	6.32	.01	.03
Sex * Ext Rel	Physical	7.24	.008	.03
Int Rel * Ext Rel	Marijuana	4.46	.03	.02
Country * Int Rel * Ext Rel	Suicide	6.35	.01	.03

Legend: Ext Rel = External Religiosity; Int Rel = Internal Religiosity

Regarding tobacco use, Low Extrinsic Religiosity is associated with more smoking in Romania, but not in the US. In contrast, no differences were revealed between countries for those with High Extrinsic Religiosity (Figure 2a).

Regarding physical exercise, in Romania, but not in US, those with High Extrinsic Religiosity are physically more active than those with low Extrinsic Religiosity (Figure 2b). Also, males, but not females, with low Extrinsic Religiosity have decreased physical activity (Figure 2c). Regarding marijuana use, Low Intrinsic and Extrinsic Religiosity is associated with more marijuana use. In contrast, Low Extrinsic but High Intrinsic Religiosity is associated with less marijuana use (Figure 2d).

(a)

(b)

(c)

(d)
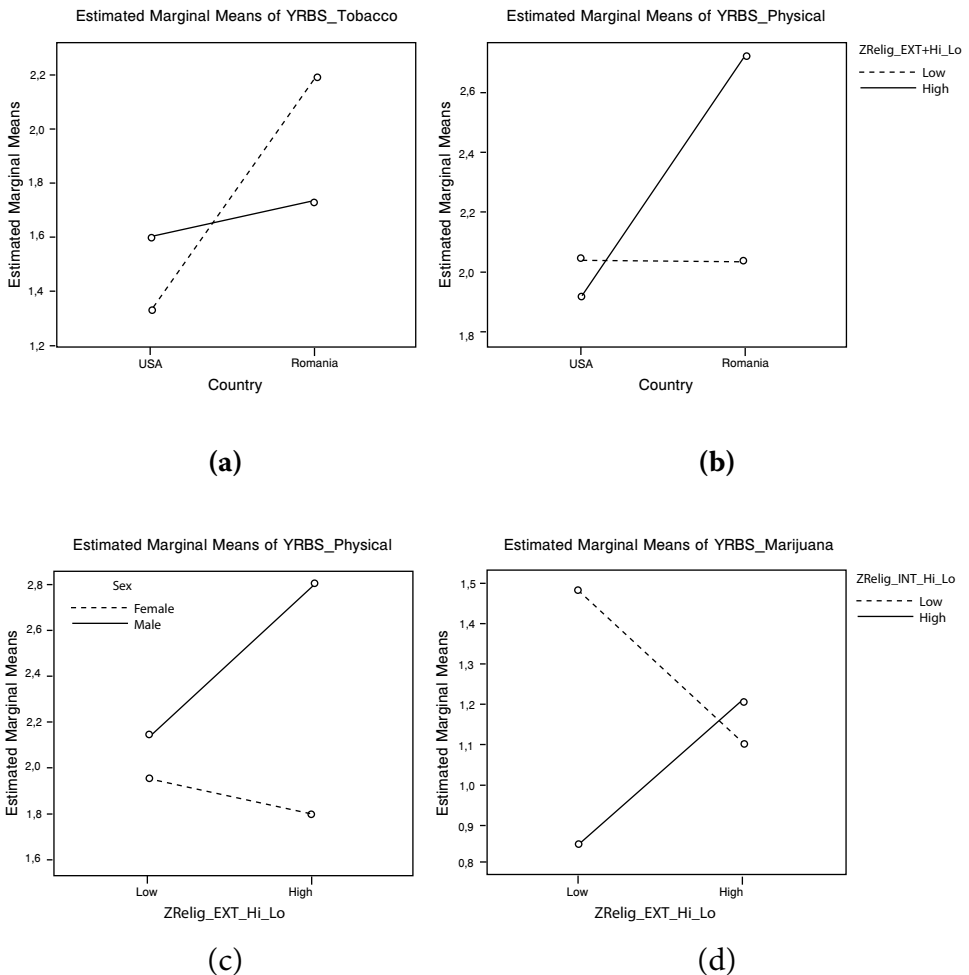
FIGURE 2. Effects of Country * Extrinsic Religiosity Interaction on Tobacco Use (A) And Physical Exercise (B), And Effects of Sex * Extrinsic Religiosity on Physical Exercise (C) And Intrinsic * Extrinsic Religiosity On Marijuana Use (D)

Regarding suicidal ideation and behaviors, Americans with High Intrinsic and Extrinsic Religiosity have higher suicide scores. In contrast, Romanians with High Extrinsic but w Intrinsic Religiosity have higher suicide scores (Figure 3).
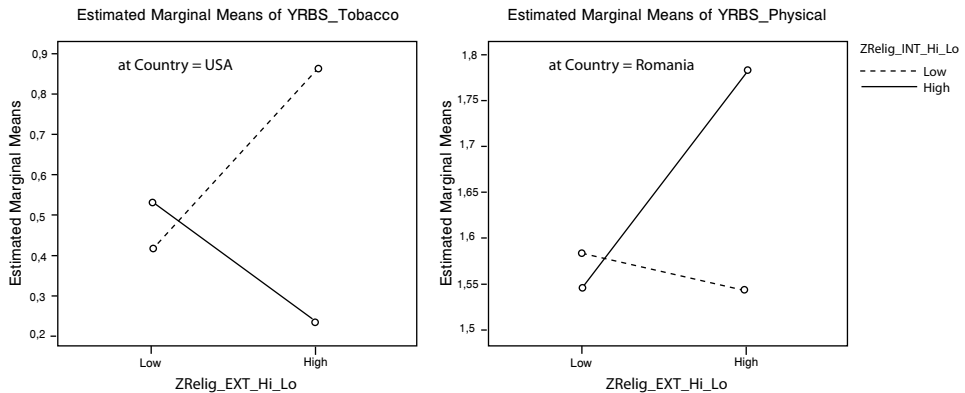
FIGURE 3. Effect Of Country * Intrinsic * Extrinsic Religiosity Interaction on Suicidal Ideation And Behaviors In USA And Romania

CONCLUSION

Risky health behaviors differ significantly in American and Romanian undergraduate college students, as a function of both cultural milieu and gender. Compared to Americans, Romanian students present significantly greater risks for safety, violence, suicide, tobacco, and drugs use. In contrast, American students present greater risks for unhealthy eating habits and decreased physical exercise. Compared to females, male students present significantly greater risks for violence, tobacco and alcohol use. In contrast, female students present greater risk for decreased physical exercise. Romanian females have higher scores on violence than American females and American females have riskier eating behaviors than Romanian females. There was no significant difference between the scores of American versus Romanian males regarding violence, or eating behaviors.

Religiosity is a protective factor against certain risky health behaviors, but its influence is mediated by type of religiosity, gender and cultural milieu. Low Extrinsic Religiosity is associated with decreased physical activity in males and more smoking in Romanians. High Extrinsic Religiosity is associated with more physical exercise in Romanians, but not in American students. Low Intrinsic and Extrinsic Religiosity is associated with more marijuana use. In contrast, Low Extrinsic but High Intrinsic Religiosity is associated with less marijuana use. Americans with High Intrinsic and Extrinsic Religiosity have higher suicide scores but Romanians with High Extrinsic but Low Intrinsic Religiosity have higher suicide scores.

Risky behavior among youth pose a major concern. This study was an attempt to better understand how these behaviors are influences by religious orientation, gender and cultural milieu. Perhaps further research will led to prevention.

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SUBJECTIVE WELL-BEING, SENSE OF COHERENCE AND SELF− EFFICACY: RESULTS OF AN INTERNATIONAL SURVEY

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Abstract. Introduction: *The article presents the results of international survey by more than 2000 students from three European countries: Germany, Poland and Bulgaria. The aim of the article is comparison in the subjective well-being, health and different personal determinants by the first-year students from these three European countries and their relation.*

Methods: *803 German, 709 Bulgarian and 591 Polish students were surveyed by help of identic for the three countries questionnaire, developed and probed in University of Bielefeld. The questionnaire contains different areas of subjective health, well-being, social support and personal determinants. The subjective well-being was surveyed by the scale WHO 5 Well-Being Index and Sense of Coherence by the shorted version of Antonovsky Sense of Coherence scale – the Leipzig-SOC scale (SOC-L9, Schumacher et al., 2000). Self-efficacy was measured by the General Perceived Self-efficacy scale (GSE) by Schwarzer and Jerusalem.*

Results and discussion: *Significant correlations were measured by the well-being and self-efficacy by the three countries (p<0.001). Well-being was also significant correlated with Sense of Coherence by the students from three countries (p<0.001). The both personal determinants were highly correlated with each other. The results showed significant cross-national differences in different surveyed areas and the need of follow-up survey.*

Keywords: *Well-being, Self-efficacy, Sense of Coherence, Cross-cultural*

INTRODUCTION

The modern health research reveals the three main components of human health: the psychological components of health, the social components of health and the physical components of health. Human health is recently more often connected with the human well-being. Contemporary health definition find in the statements of World Health Organization „Health as a state of complete physical, mental and social well-being and not just the absence of disease or infirmity (WHO, 1948). The contemporary researchers emphasize the importance of social and psychological factors of health: „Health seen as a skill to build and retain social relationships and networks thought a positive self-esteem and self-confidence" (Badura, 2002).

THEORETICAL BACKGROUND

Two of the main streams in health theories, pointed by the health researchers are Salutogenesis and Pathogenesis. Salutogenesis is an approach focused on factors that support human health and well-being, more than on factors that cause disease. The salutogenic model stresses the relationship between health, stress and coping (Antonovsky, 1987, 1997). On contrarily pathogenesis is interested in the chain of events leading to disease due to a series of changes in the structure or function of a cell or organ (see Graphic 1). Sense of coherence is an important part of the salutogenesis and is defined by Antonovsky defined Sense of Coherence as „a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) the stimuli deriving from one's internal and external environments in the course of living are structured, predictable and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) these demands are challenges, worthy of investment and engagement." (Antonovsky, 1990).
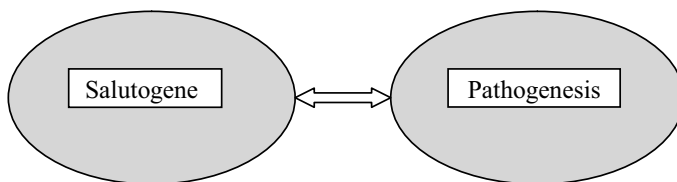
GRAPHIC 1. Salutogenesis versus Pathogenesis

If it could be shortly summarized, Sense of Coherence can be described as a view or a global orientation that recognizes the world as meaningful and predictable.

The three main components of Sense of Coherence are comprehensibility, manageability: and meaningfulness – a belief that things in life a source of satisfaction (Antonovsky, 1990, 1993).

According to Antonovsky high Sense of Coherence by individuals would outcome in positive health result. Also other researchers state that personal determinants influence health and health behavior. For example self-efficacy influences individual behavior and particularly health behavior (Schwarzer & Renner, 2009, Schrunk, 1991, Wiedenfeld et al., 1990). The perceived self-efficacy is a strong personal resource for coping with different stressors (Lazarus & Folkman, 1987). Self-efficacy according to Bandura´s definition is a belief in our ability to succeed in specific situations. Self-efficacy relates to a person's perception of their ability to reach a goal, whereas self-esteem relates to a person's sense of self-worth (Bandura, 1992, 1997). It is also a belief that one's actions are responsible for successful outcomes. By treatment of different illnesses it is determined that high self-efficacy leads to positive therapeutic change (Bandura, 1997). According the overview above, it can be presumed that there is Relation between well-being, sense of coherence and self-efficacy. The main researched areas introduced in the article are well-being and the two personal determinants – Sense of Coherence and Self-efficacy. The researched psychological well-being according Bech includes three main components as (Bech 1998, 2001):

- positive mood (good spirits, relaxation);
- vitality (being active and waking up fresh and rested);
- general interests (being interested in things).

The main aim of the article is to introduce, if there are cross-national differencies in subjective well-being, Sense of Coherence and Self-efficacy by Germans, Bulgarians and Poles. Another aim is to survey if the both personal determinants influence significant the well-being by the three national groups. The results are part of Cross-national students health survey (CNSHS) with main participants except the authors: Alexander Kraemer, Sabine Meier, Rafael Mikolajczyk (Bielefeld, Germany); Christiane Stock (Esbjerg, Denmark), Nazmi Bilir, Hilal Ozcebe, Dilek Aslan (Ankara, Turkey); Janina Petkeviciene, Jurate Klumbiene, Irena Miseviciene (Kaunas, Lithuania); Francisco Guillen Grima (Pamplona, Spain); Urszula Dudziak (Lublin, Poland); Annette Maxwell (Los Angeles, USA), Walid El Ansari (Oxford, UK), Shokria Labeeb (Assiut, Egypt) and others. The enlarging of European Union enlarges also the need of comparative researches. Health of the young people and students is an important topic and also the steps for different health promotion programs. Of course the comparison between East-and West European countries in the field of health and well-being is also very important.

METHODS

Presented are results from the Cross-national students health survey, which was initiated by University of Bielefeld, Sofia University and Lublin University. The main aim of the survey was to receive data of the health and health behavior by

first year students in different European countries and also outside Europe. In the article are presented comparison in the results from 3 contries: 803 German, 709 Bulgarian and 591 Polish students. The samples were surveyed with identical questionnaire, translated from German into Bulgarian and Polish language including different validated scales.

Well-being was measured by WHO 5 Well-being Index (Bech, 1996, 1998), which consists from 5 items and shows very good reliability (Cronbachs Alpha = .805). It included items as :

"Over the last two weeks…

I have felt cheerful and in good spirits.

I have felt active.

I woke up feeling fresh and rested."

Sense of Coherence was measured by the shorted version of Antonovsky Sense of Coherence scale – the Leipzig-SOC scale (SOC-L9, Schumacher et al., 2000). It consists from 9 items with very good reliability (Cronbachs Alpha = .805).

Perceived Self-efficacy was measured by the General Perceived Self-efficacy scale (GSE) by Schwarzer and Jerusalem (Schwarzer, 1993). It consists from 10 items (Cronbachs Alpha = .807) as:

"I can always manage to solve difficult problems if I try hard enough."

"It is easy for me to stick to my aims and accomplish my goals."

RESULTS AND DISCUSSION

The results from the survey showed significant cross-nation differences in Sense of Coherence by the three researched nations. Similar results by Polish sample and Bulgarians, Germans differ with significant higher results ($p<0.001$) (Graphic 2).

Sense of Coherence in 3 nations
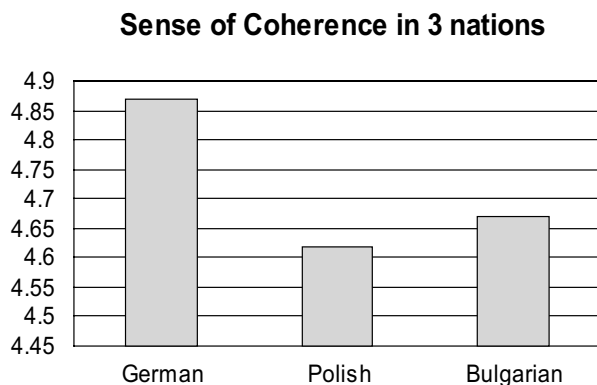
GRAPHIC 2. Differences in Sense of Coherence by Germans, Poles and Bulgarians

Also in the results of perceived Self-efficacy significant cross-national differ-
ences were found. Polish sample shows lowest result in this personal determinant
(p<0.001),

Similar results were found by Germans and Bulgarians (Graphic 3).

Self-efficacy in 3 nations
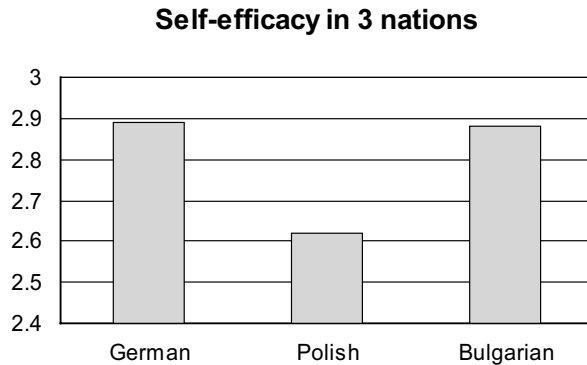
**GRAPHIC 3. Differences in Self-efficacy by Germans, Poles and Bulgarians
By psychological well-being similar results by German and Poles, Bulgarian
differ with significant higher result (p<0.001).**

Subjective well-being in 3 nations
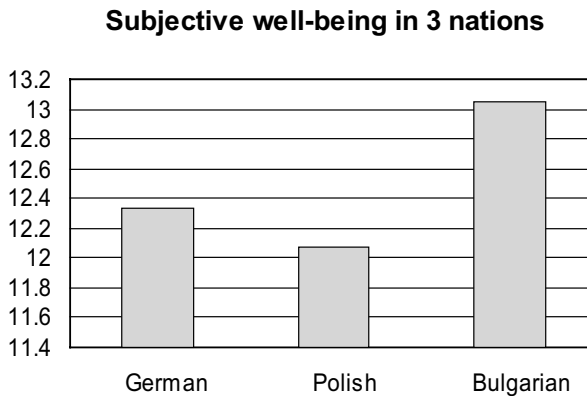
GRAPHIC 4. Differences in Well-being by Germans, Poles and Bulgarians

Also by the provided SPSS correlation analysis, significant correlations
are measured between the well-being and self-efficacy by the three countries
(p<0.001). Well-being was also significant correlated with Sense of Coherence by
the students from three countries (p<0.001). Another important result was that
the both personal determinants were highly correlated with each other (p<0.001).

The main research questions investigated by the regression model were:

- ⫸ What are the determinants of well-being by Germans, Bulgarians and Poles?
- ⫸ Do personal determinants influence significant well-being by the three researched nations?
- ⫸ Are there significant differences in the influence by the three groups?

The results from the regression model showed that there are differences in the determinants by the three nations. Well-being by Germans is only significant influenced by Sense of Coherence. Well-being by Bulgarians and Poles is significant influenced not only by Sense of Coherence, but also by Self-efficacy.

Important result is that there is a common predictor by the three nations: Sense of Coherence is strong predictor of well-being by the three groups (Table 1)

TABLE 1. Regression model. Predictors of well-being

Model – determinants of Well-being			
	R square	Beta	Sign.
German			
Sense of Coherence	,24	**,493**	,000
Polish			
Sense of Coherence	**,29**	**,449**	,000
Self-efficacy		,150	,001
Bulgarian			
Sense of Coherence	,26	**,414**	,000
Self-efficacy		,157	,000

It can be concluded that the survey results showed significant cross-cultural differences between the countries. Poles showed significant lower Self-efficacy and Germans showed significant higher Sense of Coherence. Bulgarians manifested highest perceived wellbeing. A very important result is that Sense of Coherence showed itself as a strong predictor of well-being by the three nations. It can be concluded that such surveys support the need of cross-national comparison in European Union and on their ground could be planned different health promoting measures in the countries.

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THE RELATIONSHIP BETWEEN DRUG USE ATTITUDES, INTENTIONS, BEHAVIOUR, AND THE COMPLIANCE WITH CONTROL (DRUG) POLICIES

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Abstract. *The research upon the drug use phenomenon constitutes a priority theme of research for social sciences in Romania as well, for at least two reasons: First, in recent years, we have witnessed a worrying escalation of this phenomenon in our country (35.000 drug users in 2007), secondly, the research and studies conducted in Romania in the fields of drug use, although capable of offering a certain picture of drug use phenomenon, seem to be still insufficient to assess its dimensions, causes, and consequences and establish the adequate policies taking into accout the social-cultural context of our country (social norms and attitudes emphasizes the importance of empirical support for this model related to drug use problem and other social health-related behavior, as compared with other epidemiological data). Numerous studies have identified a wide variety of factors related to drug use, ranging from micro-psychological level through social-psychological or macro-sociological level. Obviously, the question of why people use drugs is an extremely complex phenomenon with multiple, interrelated socio-psychological factors. Ideally is needed a parsimonious theoretical framework which would provide systematic integration of many of the theories and findings related to drug-use motivation. The main focus of this study is to investigate the relationship between drug use attitudes, subjective norms, perceived control, intentions, willingness, behavior, and the compliance with control (drug) policies, by testing an extended theory of planned behavior (Ajzen, 1988, 1991) to predict alcohol and drug use, by incorporating new independent variables (trying as a mediator and actual control as a moderator of the attitude-intention-behavior relationship*

and, the compliance with control policies).To test the hypothesis, a representative sample of students in general population and drug use convicted from Moldavia county will be investigated across a variety of drugs. The significance of this findings for anti-drug policy and practice will be considered.

Keywords: *drug use, extended theory of planned behavior, drug policy, compliance*

INTRODUCTION

Regarding the situation of the drug use in Romania, one can state that although the trends and use patterns are very similar to those registered at the European level, we are still below the European average of most of the indicators. Although, substance use remains a cause for serious concern, one of the present issues of the Romanian society being the growing drugs demand in the general population and particularly in the youth. The legal framework was amended and completed in order to ensure a more efficient national coordination in the management of the issues referring to the illicit drug use and trafficking, as well as the development of a unitary strategic view at the level of the institutions, working in the drugs field, to the European standards applicable in the field. Starting to 2002, the National Anti-drug Agency (NAA) is the specialized legal entity, the NAA's main tasks including overseeing a standard approach of the fight against illicit drug trafficking and drug use, in accordance with the National Anti-drug Strategy (2005-2012), and coordinating the competent authorities, other state institutions and non-governmental organisations. The objectives of Romania's second anti-drug strategy (2005–12) and its action Plan for implementation (2005–08) are to develop an integrated system of institutions and public services to ensure the reduction of drug use, adequate medical, psychological and social assistance for drug users, and streamlined activities for preventing and countering the trafficking and production of illicit drugs and precursors. The strategy is comprehensive and focuses on both licit and illicit drugs, covering drug demand reduction, drug supply reduction, international cooperation, information and evaluation, interagency coordination and providing the necessary resources.

The National Anti-drug Agency has 47 Centres of Evaluation, Prevention and Anti-drug Counselling — representing the Agency at local level (41 counties and six districts of Bucharest). Also, the National Anti-drug Agency is the main institution involved in the initiation, development and coordination of drug-related research, but there are several NGOs that also have conducted research projects to estimate the prevalence of drug use among groups at risk. The proliferation of drug use in Bucharest and the big cities alarmed the public opinion by the magnitude and gravity of the drug phenomenon. In 2007, the National Anti-drug

Agency conducted the second study on drug use in the general population. The final results were published in 2008 (c. 300.000 drug users according to ANA rapport). The sample consisted in 7,500 (increasing from 3500 in 2004) respondents and was nationally representative for the target population – people aged 15 to 64. The aim of the study was to get information on the knowledge attitudes and practices of the use and trends of the use of different drugs in the general population in Romania, by determining the prevalence and the drug use patterns. Another several studies conducted by the Evaluation, Prevention and Anti-drug Counselling Centres used the quantitative sociological survey and the preferred tool was the questionnaire about awareness, attitudes, highschool students use patterns, protection and risk factors regarding smoking, drinking and illicit drugs. The results will not be expanded here.

Today, the level of drug-related research has improved, but there are still many uncovered areas. Basically, there are merely prevalence studies on different types of population (e.g. general population, school population). Unfortunately, there are few cases of experimental research regarding the outcomes of different types of interventions on drug demand, treatment or prevention and the quality of evidence across studies for the different outcomes found in the Romanian publications is in general low, meaning that, further research is very likely to have an important impact on our drug policies.

In the last twenty years, drug use prevalence and health related problems were the aim of systematic researches in order to identify the socio-cognitive correlates of drug use behavior. The link between cognitive determinants of drug use, intentions to use drugs and drug use measurement have been analyzed in systematic literature review and meta-analytic studies, the association pattern providing support for the theory of planned behavior and also for others mediators and moderators of the attitude-behavior relationship. It was found a strong relationship between attitudes toward drug use, intentions to use, subjective norms and perceived behavioral control.

Even the legal framework was amended and completed in order to ensure a more efficient national coordination in the management of the issues referring to the illicit drug trafficking and use, this changes were not effective in discouraging substances use; in fact theories based on behavioral intervention are more efficient in behavioral changes regarding to drug use problem. Researches concerning substance use and other risky behaviors showed that interventions based on attitude-behavioral change are more effective if their aim is represented by modifiable antecedents of the target behavior. Theoretical models based on the beliefs system enclosed beliefs regarding the consequences of unhealthy behaviors and healthy alternatives, as other concepts regarding self-efficacy, social norms, positive or negative expectancies related to substance use effects, peer group, contextual factors (drug availability, lower price, advertising, media influence, etc...)

The theory of planned behavior suggests that the proximal determinant of volitional behaviour is one's intention to engage in that behaviour. Intentions are conceptualized to capture the motivational factors that influence one's behaviour (Ajzen, 1991). Attitudes and subjective norms are suggested to exert their effects on behaviour through intentions. Attitudes are the overall evaluations of performing the behaviour by the individual. Subjective norms assess the social pressures on the individual to perform or not to perform a particular behaviour. The theory of planned behavior tries also to predict behaviours that are not completely volitional by incorporating perceptions of control over performance of the behaviour as an additional predictor of intention and behaviour (Ajzen, 1991). Perceived behavioural control (PBC) is the individual's perception of the extent to which performance of the behaviour is easy or difficult, and is conceptualized to capture perceived/ actual resources and opportunities (Ajzen, 1991). All this factors are influenced by value placed on them by individual. This value is determined by: behavioral beliefs, normative beliefs and control beliefs. Instead of attitudes there are behavioral beliefs conceptualized as beliefs that behavior will produce wanted results, instead of subjective norms there are normative beliefs conceptualized as perceived expectations of others and instead of perceived behavioral control there are control beliefs conceptualizes as perceived presence of influences that help or hinder outcomes.
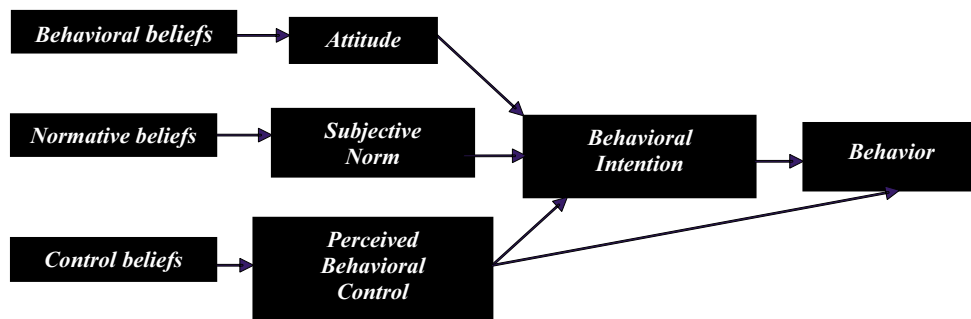
FIGURE 1. Theory of planned behaviour model

Of course, the natural question regarding the the drug use phenomen explanation could be the following: why do we need such a theory based on few components, developed in the 80' instead a integrative theory or a trans- theoretical model? First of all, because the empirical support has been found for the usefulness for the theory of planned behavior for a wide range of behaviours and domanins, such as social assistance, social policies including health psychology (Armitage și Conner, 2001). Secondly, the theory o planned behavior is usefull in explaining and predicting behaviours regarding legall and illegal drugs, the studies results in this field being considered as an important support in order to improve adequate social drug policies. Another argument is the fact

that the theory of planned behavior has a good predictive power for behaviors related to health (the most recent of meta-analyses (Armitage & Conner, 2001) reviewed 185 independent studies and found that the theory of planned behavior accounted for 27 percent of the variance in subsequent behavior, and 39 percent of the variance in behavioral intentions), and the predictive utility of the model may be enhanced by conceptualising behavior a part of a process that leads to goal achievement and improved attitude-behavior relationship and by taking into account other determinants of the behavior, such as past behavior, personality factors, anticipated regret. If we consider drug use at least at one moment, as a problem of impaired control it is necessary to extend the theory of planned behavior by incorporating new additional variables one of the strenghts of the theory of planned behavior being the openess for including additional variables that leads to an encreased predictibility power.

Public health studies have identified a number of individual (personality), social (parents, peers), contextual (drug availability), marketing (advertising), media that influence the trial decision and then the continued use of alcohol ond other illicit substances. According to Donovan, 1997 apud. Amonini C. & Donovan J. R. (2006), eight major constructs are able to explain substance use since alcohol, tobacco and marijuana use share a number of antecedents as peers influence, parental influence and personality factors. There are five external constructs including parental factors, peer factors, marketing factors, contextual factors, compliance with social control policies and three internal constructs including health related experiences, psychological expectancies and personality related factors. Donovan suggested that the perceived morality and legacy (internal constructs) are necessary to be included in the next studies in order to evaluate their eficacy in the prediction of alcohol and other substance use. Thus have been proposed some extentions of the theory of planned behavior by incorporating new variables: personal norms (moral assessment of behavior), descriptive norms, trying, expectancies, risk perception, personality factors, willingness, habit, anticipated regret (the perceived regret when someone imagine that a behavior was realised or not). Another important aspect is the fact that each TPB (theory of planned behavior) concept comprises two specific subcomponents: concept of attitude (affective and instrumental), subjective norm (injunctive and descriptive), and perceived behavioral control (self-efficacy and controllability) and this aspect has not been examined in the studies aimed to investigate the efficacy of the theory of planned behavior in explaining and predicting substance use. More importantly, no study has investigated these multiple components all within the same model. Although multiple components for each TPB component have been demonstrated, their comparative utility as a singular predictive concept or as multiple predictive concepts has not been examined. This is another reason to concentrate the research effort toward a more complete model of the antecedent of intentions and behavior of illegal substance use.

The main focus of this study is to investigate the relationship between drug use attitudes, subjective norms, perceived control, intentions, willingness, behavior, and the compliance with control (drug) policies, by testing an extended theory of planned behavior (Ajzen, 1988, 1991) to predict alcohol and drug use, by incorporating new independent variables (trying as a mediator and actual control as a moderator of the attitude-intention-behavior relationship and, the compliance with control policies). This will lead to a fair assessment of the situation which will later reinforce the protection factors and reduce risks. The drug prevention programs run in schools throughout Suceava could thus be improved. The specific objectives are: to assess the efficacy of the theory of the planned behavior in explaining intentions and behavioural willingness related to alcohol and illegal drug use (comparing behavioral willingness effectiveness with behavioral intentions in predicting drug use), to investigate the multiple components of the theory of planned behavior into a complete framework in order to predict adolescents intentions and behavior to use drugs (including personality factors and sensation– seeking measure to investigate future transition from non-drug use to legally available (alcohol) and illegal drug use), to describe associations of adolescents' attitudes towards drug use with alcohol use and compare them with associations with marijuana use, in order to provide a model for future intervention, to assess the compliance with the control policies.

METHODOLOGY

PARTICIPANTS

Participants will be adolescents who have tried or have thought about taking drugs in their life versus adolescents who have never thought or never tried drugs in their life (user-type independent variable), adolescents of different sex: boys versus girls; adolescents studying in prestigious high-schools versus adolescents studying in the peripheral high-schools; adolescents from the urban zones versus adolescents form the rural zone.

PROPOSED VARIABLES

Attitude (affective and instrumental): sum of beliefs about a behavior weighted by the evaluation of those beliefs.

Subjective Norms (injunctive and descriptive): perceived social pressure regarding behavior.

Perceived Behavioral Control (self-efficacy and controllability): perception of ability to achieve behavioral outcome. Self-efficacy may actually be a better predictor of behavioral intention. Perceived behavioral control does not always predict actual behavioral control.

Intention: is assumed to be the immediate antecendent of behavior (the first path to behavior), behavioral goals or plans that lead to actions.

Actual behavior: the extent to which a person is actually able to carry out a behavior.

Trying: doing all the necessary pre-behaviors and otherwise satisfying all necessary conditions that are within voluntary control for the performance of behavior.

Behavioral willingness: is related to behavioral intention, but is differentiate by its reactive, deliberate nature. It is the second path to behavior that reflects the belief that adolescent risk behavior is neither planned or intentional (consistent with the assumption that drug use is a non-volitional behavior).

Risk images and perceived risk: consequences of performing behavior; the more negative an adolescent's risk image, the less willing they accept the consequences by engaging in the risky behaviors. Perceived risk will be defined in terms of physiological perceived harm, psychological perceived harm and social perceived harm.

Behavioral expectations: the subjective probability that a behavior will actually be performed (behavioral intentions are a plan, meantime behavioral expectation are a prediction). Behavioral expectations are a different concept from outcome expectations defined as someone beliefs that the actions will lead to benefits or harms. Theoretically, answering to behavioral expectations items people will take into account influential factors as anticipated regret, past behavior). Past behavior is related to habits that may influence behavior independent of attitudes and intentions; this is a reason of why past behavior will be added to the new model of the theory of planned behavior in explaining and predicting substance use.

Anticipated regret: the regret one experiences when imagining having or not heaving performed a behavior. This refer to the main psychological effect of regrets and worries experienced before any negative consequence happened. It is interesting to see if adolescents who do not spontaneously anticipate the regret are more compliant in an influence situation.

Personal norm: personal moral evaluation of the behavior.

Policies compliance: legitimacy perceptions (laws relating to alcohol and drugs are justified). With regard to Romanian drug policy it must be said that we have restrictive laws concerning drug use: In Romania, drug consumption per se is not an offence, but drug possession is one. Following a change in 2004, penalties for possession are now separated

by type of drug — 'risk' or 'high risk', and there are new separate concepts of user and addict.

GENERAL HYPOTHESES:

- Attitudes, subjective norms, perceived behavioral control will account for intentions and behavioral willingness to use alcohol and drugs.
- Behavioral willingness and intentions to use alcohol and drugs will predict alcohol and drug use among adolescents.
- TPB will be more effective in accounting for and predicting intentions to use alcohol and drugs and the use of alcohol and drugs among adolescent by incorporating new additional variables: personal norms-moral perceptions of illegal drug use (taking drugs is morally wrong or good), descriptive norms, legitimacy statement: laws relating to illegal drugs are justified or not, trying drugs, perceived psychological benefits-positive or negative expectancies, personality-related factors, anticipated regret, past behavior, behavior willingness, actual control.
- Trying will mediate the relationship between intentions to use drugs and drugs uses.
- Actual control will moderate the relationship between trying and behavior.

SPECIFIC HYPOTHESES:

- Adolescents with attitudes favorable of drug use are more likely to be drug users than those who do not approve of drug use
- Parental attitudes towards drug use and friends positive attitudes towards drug use are associated with adolescents' drug use (the magnitude of these associations with alcohol use will differ from the magnitude of similar associations with drug use)
- Adolescents who underestimate the risks and harms associated with drug use are more likely to engage in drug use, conversely, those who believe that a specific substance causes harm are more likely to not use the substance (disapproval of drug use and perceived risk of harmfulness due to drug use are important determinants of drug use among adolescents and this might apply to other illegal drugs) (all specific hypotheses are not presented here).

INSTRUMENTS

Once identified the major themes and the relevant aspects to be measured, the next step is to construct and pre-test the questionnaires. The first step of pre-testing will focus on construction of the items and the next pre-testing will verify

the instrument created by the means of the consistency analysis or the reliability analysis (Alpha-Cronbach index, which should be above .70). Multiple regression analysis will be used to test the hypotheses.

RESULTS

We will inform you about our results in the following publication.

CONCLUSIONS

Although there are a larger number of studies regarding drug use prediction using the theory of planned behavior, in our national context research, there are no studies in this field. The advantage of the theory on planned behavior is not only its large applicability in explaining a wide range of behaviors, but also its flexibility in adding new variables in order to improve behavior predictability. For the original model we can assume some limits, including the fail of taking into account personality factors, but this problem may be override by examining mediators or moderators of the attitude-intention-behavior relationship. In this study, personality factors assumed to predict drug use will be take into account. Another possible limit may be the disparities in some concepts and definitions, but this issue will be addressed in order to avoid causal ambiguities affecting empirical findings.

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ADOLESCENTS' MEANINGS OF HEALTH: NARRATIVES FROM BULGARIA AND ROMANIA

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Abstract. *Adolescents' meanings of health and the body, and how these entwine social and cultural meanings and discourses, are important for understanding their worldviews. The current study stems from The Health Behavior School-aged Children (HBSC) international project 2005/6 in collaboration with WHO, conducted in Bulgaria and Romania. Semi-structured interviews were conducted with adolescents aged 11, 13 and 15 years, of which 29 in Bulgaria and 31 in Romania. They were tape-recorded, transcribed verbatim, analyzed through Interpretative Phenomenological Analysis. This included readings of each interview close to the text and identification of recurrent themes across interviews; identification of clusters of codes and superordinate themes. We address similarities and differences in the meanings of health for adolescents in Bulgaria and Romania, specifically around meanings of body image, diet, physical activity and food as constructing an embodied identity. The main themes included: health as a positive value; movement as health and social connection; ambivalence surrounding dieting and weight control; body image satisfaction intersecting with body image concerns; and parental and peer input in the construction of embodied identities. These are important to consider when developing school health promotion campaigns.*

INTRODUCTION

People's ideas and meanings of health change with age. Recently there has been increasing interest in children's meanings of health, considering the rising

health problems in children worldwide, and thus importance of these meanings for health promotion (Piko & Bak, 2006). For this, it is crucial to understand how children's and adolescents' meanings of health and the body are entwined with social and cultural meanings and discourses (Lyons & Chamberlain, 2006).

An important aspect of children's understandings of health is the images and meanings they have of their bodies. Generally in psychology, this aspect of health has been studied through the construct of body image. Body image is a complex and multidimensional construct in health psychology, connected to perceptions, feelings, and thoughts about the body (Grogan, 2006). Body image has been studied as it relates to appearance, satisfaction and concerns about the body, the weight, shape and size of the body as a whole, and of specific body parts (Stanford & McCabe, 2002). Research regarding body image has included its perceptual aspects and attitudinal aspects (evaluative/affective and cognitive/behavioral dimensions) (Grogan, 2006). Research has addressed discrepancies between actual and perceived body size; as well as more recently, between perceived and ideal body shape and size. Most research however deals with dissatisfaction with weight, and this as related health behaviors, self-esteem and others.

Additionally, more interest is currently evident regarding gendered dimensions and sociocultural influences on body image and meanings of the body (Grogan, 2000). Traditionally, most research on body image has addresses girls' and women's perspectives, but during the past few years, the research has expanded to include more men and boys. This takes into consideration the fact that the social influences and socially constructed ideals of the body are different for boys and girls (Conner, Johnson, & Grogan, 2004). While the ideal of slenderness is dominant across many cultures for girls in the current historical period, boys and men are under pressure to maintain slender but muscular bodies. Body image has been shown to be clearly gendered, in the sense that boys and girls have different body concerns, as early as 8 years old (McCabe & Ricciardelli, 2003). Media images and messages are very important in how one's own body is evaluated. One's satisfaction with one's body is additionally shaped by peers and parents (Shroff & Thompson, 2006). Having friends who are preoccupied with dieting, or receiving negative feedback from peers about weight and looks, may lead to body dissatisfaction, eating disorders and lowered self-esteem.

Dissatisfaction with one's body can be related to health and provoke certain health behaviors: engaging in or avoiding exercise, use of anabolic steroids for muscularity (which in turn can lead to liver, kidney and other health problems), and dieting. Body dissatisfaction can also lead to extreme measures to control appearance and weight, such as binge eating, vomiting, surgery, and others. Fear of gaining weight can indirectly affect other health behaviors, such as not quitting smoking (Grogan, 2006).

In Bulgaria and Romania, children grow up in the globalized media and marketing influences – such as the fitness, weight loss, make-up and fashion industries. Additionally, it is of interest to understand the local cultural meanings of health and the body and how they entwine to shape children's and adolescents' understandings and behaviors.

METHODS

This paper is based on data from the international *Health and Behavior in School-aged Children Study* (Currie et al., 2008) in which Bulgaria and Romania participated for the first time in 2006 (Baban, 2009; Vasileva et al., 2009). This study is unique in that it covers health and health related behaviors of young people, within their social and school context in 41 countries. It is conducted in collaboration with the World Health Organization's European Office. Beginning in 1982, every four years representative surveys are being conducted in a growing number of countries around the world. Bulgaria and Romania joined the HBSC network in 2004 and conducted the first study in 2005/2006. The topics covered by the survey include different health and risk behaviors for the children, their social context, health outcomes such as self-rated health, life satisfaction, health complaints, and injuries. The topics of overweight, obesity, and body image were also covered in the survey (Janssen, 2005; Nemeth & Ojala, 2005).

The samples for the structured survey were national representative samples of 4 854 Bulgarian adolescents and 4 684 Romanian adolescents from the three age groups targeted by HBSC: 11, 13 and 15 years olds. The survey data were prepared and analyzed according to the international HBSC protocols (Currie et al., 2008). In addition, we conducted semi-structured interviews with 29 children in Bulgaria and 31 children in Romania. The interviews were conducted according to guidelines for interviewing children (Docherty & Sandelowski, 1999). The interviews were tape-recorded, transcribed verbatim, analyzed through Interpretative Phenomenological Analysis (Smith, Flowers, & Larkin, 2009). This included readings of each interview close to the text and identification of recurrent themes across interviews; identification of clusters of codes and superordinate themes.

RESULTS

We begin with some results related to weight and body image in children in Bulgaria and Romania, derived from the quantitative data. This will give us an understanding of the prevalence of different weight and body image categories, as well as body related behaviors.

WEIGHT and self-perceived weight

Weight categories are defined based on the International Obesity Task Force cut-off points for Body-mass Index for children (Janssen, 2005). On the other hand, to assess self-perceived weight, children were asked how they see their body with possible answers: "much too thin", "a bit too thin", "about the right size", "a bit too fat" and "much too fat" (Alexandrova-Karamanova, 2008; Szentagotai, 2009).

According to the above, in Bulgaria, 11.2% of the children are overweight, and 1.9% can be considered obese. Normal or underweight are 86.8% of the children. Overweight and obesity are more evident for boys than for girls. For overweight, the percentage is 16,0% for boys and 6,6% for girls, and for obesity 2,9% for boys and 0,9% for girls.

At the same time, when self-perceived weight is assessed for Bulgarian children, (Fig. 1), we find that only 59.2% of the boys and 55.6% of the girls consider themselves to be "about the right size". Over one third of the girls perceive their bodies as too fat, and the rest as too thin. Fewer boys (23.1%) consider themselves to be too fat, but more boys (17.7%) than girls (12%) perceive themselves as being too thin.
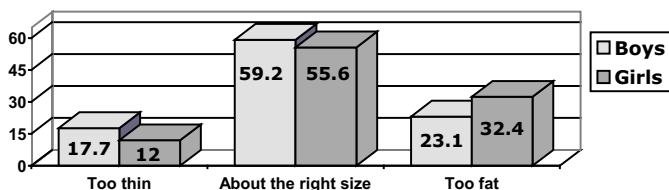
FIGURE 1. Percent of boys and girls in the three categories of self-perceived weight for Bulgaria

The findings for overweight and obesity, based on BMI, are similar for the Romanian sample (Fig. 3). Over 90% of the girls are within normal ranges of BMI, 8.1% are overweight and 1.2% are obese. Overweight is more prevalent for boys, with 83.5% being in the normal range, 13.3% are overweight and 3.2% are obese.

At the same time, however, nearly one third of the girls (28.7%) consider themselves to be too fat, and only 52.2% of the girls consider their bodies to be the 'right size' (Fig. 2).
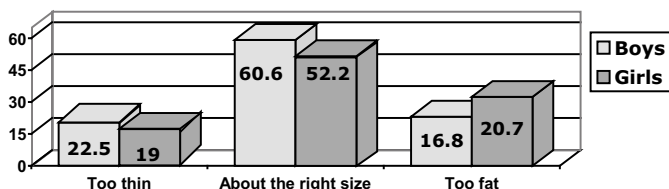
FIGURE 2. Percent of boys and girls in the three categories of self-perceived weight for Romania

In summary, significant levels of weight dissatisfaction are observed in both genders, even though a small percentage of the children are overweight or obese according to BMI categories. Boys demonstrate higher levels of satisfaction with their weight (Alexandrova-Karamanova, 2008). Perceiving their body as fatter is more common among girls, and perceiving their body as thinner among boys. The perception of being too fat increases with age, especially for girls. Thus, the discrepancy between the children's' BMI and their perceived weight can be attributed to cultural ideals and messages about the body.

We are not underestimating the potential negative health consequences of overweight and obesity, but are emphasizing the discrepancy between actual states of being overweight, and perceived body image as overweight. In the international comparison Bulgaria and Romania are around the middle, or lower part of the group of 41 countries in terms of percentage of overweight and obese children (Currie et al., 2008). For example, for 13 year olds, Romania is in the 15th place, and Bulgaria in the 18th place, but for 15 year olds, Bulgaria is in the 26th place and Romania in the 39th place in prevalence of overweight and obesity (the list is headed by the United States). When we look at perceptions of body as too fat, we similarly see that the two countries are around the middle or lower part of the international list. Germany leads the list -– for 15 year olds in Germany we have the highest percent of children who think they are too fat – 58% of girls and 33% of boys (while 11% and 16% , respectively, are overweight or obese according to BMI).

Satisfaction with appearance

From the above analysis we see high levels of dissatisfaction with one's weight, yet the dissatisfaction with one's looks and appearance is not as high. This is true for the children in both Bulgaria and Romania. Satisfaction with one's appearance is assessed through the question: Do you think you look… "very good", "quite good", "average", not to good and "not good". Most children in Bulgaria have a positive body image: 42.8% rate their looks as quite good/very good and 45.4% as about average. A negative body image is reported 11.7% of the students, with 14.8% for girls and 8.5% for boys. Boys are more satisfied with their body appearance and looks 46.5%, than girls 39.4% (Alexandrova-Karamanova, 2008). The gender differences are more obvious in Bulgaria than in Romania.

Most children in Romania have a positive body image: 44.8% rate their looks as quite good/ very good and 45.3% as about average. A negative body image is reported by 9.9% of the girls and 9.0% of the boys. There is little difference between boys (45.5%) and girls (44.8%) in satisfaction with appearance (Szentagotai, 2009).

WEIGHT CONTROL BEHAVIOR

Dieting behavior is assessed through one question in the HBSC protocol: students were asked if they are currently on a diet or doing something else to lose weight. Possible answers were: "No, my weight is fine"; "No, but I should lose some weight"; "No, I need to put on weight"; and "Yes".

In Bulgaria 13.8% of the children are on a diet to lose weight. Dieting is twice as more prevalent in girls than in boys, with 18.3% of the girls and 9.2% of the boys dieting. Since 27,7% are not on a diet, but believe that they should lose weight, they might start dieting in the future. With age the number of girls who diet increases, while the number of boys who diet deceases.

In Romania similarly, 11.1% of the children are on a diet: 12.9 % of the girls and 8.8% of boys are dieting. One third (30.3%) of the girls and 16% of the boys however are not on a diet, but believe they should lose weight. With age the number of girls who diet increases (reaching 15% in 15 year old girls), while the number of boys who diet deceases (Szentagotai, 2009).

More broadly, popular weight control methods for Bulgarian children are physical exercise is in the first place (72,7%), followed by eating more fruit and/or vegetables (63,7%), drinking more water (57,5%), eating less fat (49,0%), eating less sweets (42,6%), eating smaller amounts (42,0%), skipping meals (33,3%), and drinking fewer soft drinks (31,8%). More extreme weight control practices such as restricting diet to one or more food groups (15,0%), fasting (10,1%), smoking more (9,9%), using diet pills or laxatives (4,1%), and vomiting (4,0%) are evident, though definitely less so (Alexandrova-Karamanova, 2008).

PHYSICAL ACTIVITY

About one quarter (25.9%) of the children do moderate physical activity at least 60 minutes 7 days a week. With age the number of children engaged in this activity decreases, more so for girls than for boys. However, Bulgaria's children are among those that participate most in moderate level physical activity in the international comparison. Some of the important motives for undertaking physical activity are: to be in good shape (95,5%), to have better health 95%, to be with friends 94.5%, to look good 94.1% and to have fun 90.4%. In Romania, fewer children are engaged in moderate physical activity 7 days a week (16.7%) The difference is large between boys and girls: 23.7% for boys and 10.9% for girls. By age 15 only 16.5% of boys and 6.4% of girls are active 7 days a week.

BODY IMAGE AS A PROCESS

We have used the results from the structured HBSC questionnaire to develop a descriptive base of the prevalence of different attitudes of children in Bulgaria and

Romania toward their bodies and relevant behaviors. However, through several analyses, we also wanted to understand children's body image and embodiment more broadly and contextually, including what health means to them, how the body figures in their conceptualizations of health, how it changes and how it is socially constructed (Alexandrova-Karamanova & Todorova, 2008; Craciun, 2009). For this purpose we conducted in-depth interviews with children of the same age groups of 11, 13 and 15 year old, which was not part of the mandatory HBSC protocol. The research questions informing the qualitative part of this study focused on how the body is experienced, and how children feel, 'see' and live in their bodies and construct relational embodied identities.

The qualitative analysis was informed by a conceptualization of body image as complex, diverse and changing (Gleeson & Frith, 2006). We emphasized a non-static conceptualization of body and embodiment, which assumes transformations and fluidity from one situation to another, including in the way it is dialogically constructed during the interview itself. The dialogical construction of body image is also relevant in the process of media and social influences, which both impact children's and adolescent's meanings regarding body ideals and their own bodies, but also assume resistance to these influences.

Thus, through the method of Interpretative Phenomenological Analysis (Smith et al., 2009), in the interviews we identified the following overarching themes (with their relevant sub-themes described below):

Meanings of health
- Health as movement
- Health as of the soul
- Health as integration
- Health as freedom

> Health is... this condition in which for me, is to be alert, to be lively, to be able to do everything, and it doesn't depend on whether you are beautiful, or ugly, if you are fat, or skinny. It simply depends on the soul (BG, 11, boy)

> To be healthy means to be able to move calmly, to have a clear mental awareness about things, to be able to react in extreme situations, or even in normal life, because the world is becoming faster and faster, there is more movement, you have to be one step ahead of the others, to be able to sustain it, that's it. (BG, 15, boy)

> (Health means) to feel good in your own skin, not to need something else, to be able.. to feel free, to move freely...not to do always what other tell you to. .to feel good with yourself and then everything will be all right. Even

> *if you don't look perfect or have defects, it does not matter...it matter how you feel....it can affect you if you are too fat or too skinny (RO, 11 girl)*

> *The body and the psyche are two connected parts. .if a person has a good way of thinking then he will reach mental and physical health. …. They are all connected (RO, 15, boy)*

While some of the children's ideas about health were formulated through the absence of illness, often their conceptualizations were quite broad. They often included notions of movement, activity and energy. Spontaneity and activity without limitations ('to be able to do everything') are key within their definitions of health. Spontaneous and free movement is seen by the children as an important element of health. Being comfortable within one's body ("in one's skin") is also important – and we see how they construct health through concepts of naturalness and spontaneity. Elements of strength and endurance as part of health become evident particularly for some 15 year olds, more often for boys. Older boys begin to talk about being toned and having muscles as part of their definitions of health – thus, particular body shapes begin to be associated with health. The resistance to social expectations for beauty, and definitions of ugliness, defectiveness is more evident for 11 year olds compared to older children.

Importantly, conceptualizations of health for most of the children are very holistic and reflect a seamless integration of mind/body/soul. For younger children the integration comes through as a basic essence of who the person is. The older children also talk about the person in holistic terms, but they have first identified the separate parts of mind/body/soul and then insist on integrating them together.

Embodied movement as health and connection

- ⚜ Movement as health
- ⚜ Movement as belonging
- ⚜ Movement as spontaneity vs. structure & discipline

> *I practiced lots of sports, tennis even, swimming, basketball, volleyball, swimming again, I stopped. Probably I will have to start something eventually. I go with my bicycle from time to time…I walk a lot…I don't have a bus pass, I always walk …I like to listen to music while walking ….(RO, 15, boy)*

> *She (mom) goes to fitness. Actually she ignited it in me. She does a lot of sports, she eats healthy, she does exercises, she is disciplined and she is in favor of continuous development of body and soul. (BG, 15, boy)*

I love this sport, Because of the group mainly, it is like another world some-how. Everyone knows each other there, that is their community and it is good to have more friends. (BG, 15 girl)

Embodied identities are constructed as being in motion, health as being in motion, as well as 'naturalness' of motion. Yet, the definitions of health through movement illustrate the emerging interplay and tension between spontaneity and structured movement. Some children delineate this explicitly, while for others it emerges more implicitly from the narratives. Some children contrast spontaneous, holistic movement with structured gym-based sports and movement, preferring the first. Others have become routinely involved in more structured activities.

Through movement children also construct relational identities, illustrating how their enthusiasm for sports and physical activity is sparked by parents. Yet, in this connection with parents through movement, the tension between movement as expressiveness/spontaneity and structured is also evident – as parents' approaches to fitness are modeled, the conceptualizations of movement as a structured activity become internalized. Parents' influences on children's embodied identities serve to both spark movement and also to structure and discipline movement into its adult forms. Through movement and sport they construct relational identities in the connection with peers, they become part of a group.

With age the relational/connection aspects of movement and embodiment receded, and physical activity becomes more individualistic, the body acquiring more firmly defined boundaries.

Body satisfaction intersecting with body concerns
- Acceptance and resistance of social messages
- Gendered dimensions of body satisfaction and concerns

The way you look influences your state of mind, your health and it is important. ...at this age when we are more unstable emotionally, you like a certain type of clothes and you see you don't fit into them, that they are too large, normally you suffer...but I don't thing that some guy from outside should impose a certain image.. the standards of beauty.. that destroys lives, especially now with all the eating disorders, anorexia and bulimia ... (RO, 15, girl)

Above all, a girl has to be beautiful.. Boys can be how they want. A girl she should be nice.. she has to dress nice, she should not be difficult and think that she is a star... they see they are nobody but they want to be stars...perhaps their parents are somebody important but not them.... she should be thin, tall 1,80, I don't like small ones ...I speak not just for me, I believe everybody is like this, all men ...(RO, 14, boy)

> *Looks matter a lot, your physical shape, if you are well built, athletic ..like a sportsman, I do some exercise to be in shape.. I believe it is go to practice sport at this age because later.. it is better not to let time fly.. (RO, 15, boy)*

Many of the children continuously move back and forth between an acceptance and satisfaction with their appearance and body, and a questioning of the adequacy of their body. The dialogical nature of body image is evident in the way many of them are clearly both influenced by media and cultural messages regarding the body, and also resist and protest them. Gendered evaluations and ideals are evident early on. Though usually responding in answer to questions from the interviewers, differing assumptions about the way that boys and girls should look and weight were quite evidently elicited. Gender differences in attitudes toward weight gain are evident as early as 11 year old, with the sociocultural ideals of women's bodies as tall and thin, while male bodies as muscular and strong is evident in the children's constructions of the healthy body and desired appearance. This is also an example of how a striving toward a certain body shape has been instilled by this age, and as we can see in the next theme, the striving and control themselves are part of definitions of health.

Ambivalence surrounding dieting and weight

- Body/weight as project
- Body as expressive/ as disciplined

> *…sometimes I eat what I get my hands on, I focus on what I eat in the morning. …I don't always calculate what I eat, how many proteins. it is what I feel. I believe that we feel, we know best, our body dictates ..if you feel the need for sweets, eat sweets, but don't indulge, so moderately from everything, what you feel the need on the spur of the moment (RO, 15, girl)*

> *It is called the Lunar diet, seven days. In the description it says that you lose one kilo a day. Fruit, vegetables, white chicken meat, fish, for dinner sometimes it is 2 hard boiled eggs, for lunch -fruits and vegetables, for breakfast – bitter coffee, but I don't drink coffee, so tea with no sweetener. (BG, 11 girl).*

> *I can't say that I am thin. My family also does not say that I am thin. They also say that I'm not fat, just a little chubby. To change my looks, I follow the food combinations. For several months I've been on a diet. Maybe I can change my shape a little, to lose some more weight, nothing else. (BG, 11 girl)*

> *Usually I want to gain weight, but since I run every day... I eat, I run and I can't gain much weight. I want to be larger... too look larger, healthier. (BG, 11, boy)*

We see that children construct their body image within a small interval of the ideal and "normal" weight. Thus, there is vigilance and control of one's weight and body shape within that range as early as 11 years of age. We can see in the first quote, this back and forth shift between 'what the body feels' and 'not indulging' is continuously happening, and thus one's behavior in relation to the body is monitored and controlled. A dimension of embodied identities becomes this self-observation and discipline. The body is perceived as malleable and controllable, needing sustained observation and shaping.

CONCLUSIONS

The HBSC survey data show that a large majority of children are in the normal weight range according to BMI. Yet, when perceived weight is assessed, a much larger proportion of the children are dissatisfied with their weight -– girls mainly seeing themselves as too fat and boys as too thin. A substantial group of children are currently on a diet, but most of them are not using extreme forms of weight control. We observe an increase in dieting in older girls, and a decrease in older boys, who then focus more attention on muscle building.

The quantitative analysis gives us a picture of the prevalence of body satisfaction/ dissatisfaction, discrepancies between actual and perceived weight, and health behaviors, while the qualitative analysis helps us understand, for those children for whom these issues are relevant, what are their deeper understandings about them. The qualitative analysis of children's narratives sheds light on details of the meanings of the body that potentially relate to tendencies observed in the quantitative data.

Health is defined by the children holistically and through spontaneity, movement and expressiveness. Yet, especially with age, the body comes under structured control, disciplining of the body in food and movement becomes a value. The body is constructed through the dualities of expressiveness vs. structure (regarding sport); and spontaneity vs. monitoring (regarding food and dieting). Children's embodied identities are constructed through expressiveness, spontaneity and naturalness – more so for 11 year olds. For older children there is an evident tension between spontaneity (of movement, of food enjoyment) and structured forms of movement and food control. Though obvious examples of weight control are heard in the narratives even of 11 year olds, as a whole the way their identities are shaped has a sense of spontaneous expressiveness and enjoyment. With age this becomes more muted, with discipline, routine, coming to the foreground.

Relational embodied identities are constructed through sport and movement – through connection, responsibility, support, and trust. This is entwined with the development relational concerns surrounding the body, looks and movement, increasing for 15 year olds. Embodied relational identities become more comparative and worry about fitting within ideals becomes more evident. This tendency is paralleled by our observation in the quantitative data that physical activity decreases for the 15 year old children – we need to consider that structuring activities and the comparative dynamics that are evident for older children might be implicated in reducing their enthusiasm for being physically active.

The narratives reveal the details around children's concerns about balancing within a assumed perfect weight and body shape, the on-going self-observation, control and discipline to sustain the body within a certain preferred range. Thus, the body becomes conceptualized more as malleable and controllable, needing sustained observation and shaping within tight criteria. Nevertheless, the body is constructed by the children through the duality of resistance and acceptance of culturally mediated ideals (resistance being more evident for 11 year olds). The interviews also reveal gender gendered differences in terms of health, movement, looks, weight and body image.

Understanding children's detailed negotiation of health and body image is important for any health promotion interventions. It is important to approach any education and health promotion interventions in such a way, so that they don't themselves increase body concerns.

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PSYCHOLOGICAL PREDICTORS OF ADJUSTMENT IN BULGARIAN ADOLESCENTS

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Abstract. *This paper examines the social contexts of adolescents' life – family, peer and school, and their relation to youths' positive adaptation. Positive successful adjustment covers different domains of functioning relevant to this age-group: absence of behavioral and emotional problems (smoking/alcohol use, involvement in bullying, subjective health complaints), life satisfaction and competence (good academic achievement and social competence) in order to manage with the main tasks and adjust to unfavorable life conditions like single-parent family and/or low family affluence. Communication with parents, time spent with friends, classmates' support and school pressure are examined as predictors of good adjustment.*

Keywords: adolescence, adjustment, family, school pressure, peers

INTRODUCTION

The study examines the social contexts of adolescents' life – family, peer and school, and their relation to youths' adjustment. Successful adjustment covers different domains of functioning relevant to this age-group: absence of behavioral and emotional problems, life satisfaction and good academic achievement. With successful adjustment students can manage the main tasks of their lives and deal with unfavorable life conditions. Family structure and family affluence, communication with parents, time spent with friends, classmates' support and school pressure are examined as predictors of good adjustment.

Adolescence is a transitional period between childhood and adulthood, during which the child undergoes significant biological, cognitive and social changes. During this life period young people have to acquire and consolidate new skills, attitudes and values to be prepared for the transition into adulthood. Adolescence is marked by rapid and often dramatic intra-individual changes and also by trans-

formations in the family, peer group and school, the contexts in which children live. Many behavioural problems appear or show a significant increase during this period (Steinberg & Sheffield, 2001). Experimentation with health-impairing behaviours like smoking, alcohol and drug consumption emerge at this age, but relatively few teenagers ultimately develop drinking and/or smoking problems (Hughs et al., 1992).

Achieving independency from parents is another important issue in adolescence in relation to establishing autonomous functioning, identity formation and making one's own decisions. At the same time, peer relationships have a growing influence and play an intensive role in providing a context to learn various emotional, social and cognitive skills (Bendt, 2002).

Adjustment refers to positive adaptation which is substantially better than what could be expected to a given risk condition (Luther&Zelogo, 2003). It is usually defined as absence of mental symptoms, disorders and behavioural problems, or as competence and fulfilling major developmental tasks (Olsson et al, 2003) and covers many aspects of functioning relevant to adolescence.

Parent-child relations, school environment and peer relations may predict adjustment. Communication with parents and with peers is an indicator of the quality of relationships during adolescence and thus of relationship adjustment. Adolescents with better communication in both social contexts -– with their parents and peers -– have fewer psychological complaints (Moreno, et al., 2009). It is found that family and peer relationships contribute independently as well as jointly to adjustment (Rubin et al., 2004). The quality of the school environment is especially important for adjustment of disadvantaged students. The impact of classmate support and school pressure is stronger for students in the risk groups than for the more advantaged peers (Orkenyi, et al., 2007).
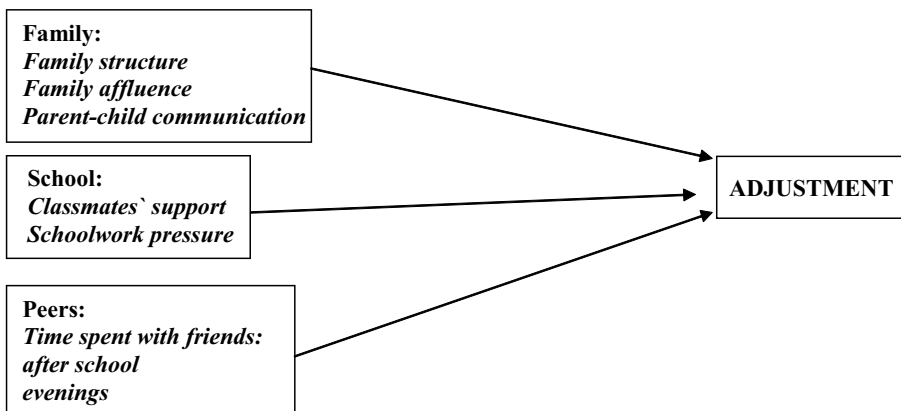
FIGURE 1. Dimensions of the social contexts of adolescents' life: family, peers and school and their influence on youths' adjustment.

The aim of the study is to examine the level of adjustment in Bulgarian adolescents and the influence of different psychosocial factors from the three main life contexts: family, peers and school.

The main tasks following the objectives of the study are:
- establish the proportion of good/poor adjustment in Bulgarian adolescents according to gender and age;
- test the psychosocial predictors: family, peers, school as factors influencing the level of adjustment;
- examine the role of self-efficacy and social competence as moderators between the psychosocial factors and the level of adjustment.

METHOD

The data are from the first Bulgarian **Health Behavior in School-aged Children (HBSC) study** 2005/2006 which is part of a WHO Cross-national Collaborative survey. It concerns health, health behaviours and health outcomes in young people which are analyzed in the social context of family, school and peer culture (Currie et al., 2008).

The Bulgarian representative sample consists of 4 854 schoolchildren aged 11, 13 and 15. They were administered the International standard questionnaire for the 2005/2006 survey, as well as some optional questions.

Adjustment covers different domains of functioning so are to manage with the main tasks and to cope with unfavorable life conditions.

Good adjustment includes two aspects:
- high life satisfaction and good academic competence
- absence of behavioral and emotional problems: smoking, alcohol use, involvement in bullying, subjective health complaints (Orkenyi et al, 2007)

ADJUSTMENT:		
GOOD ADJUSTMENT		POOR ADJUSTMENT
	POSITIVE ASPECTS:	
High (+)	Life Satisfaction	Low (-)
High (+)	Academic achievement	Low (-)
	NEGATIVE ASPECTS:	
Low (-) (never/rare)	Health complaints	High (+) (often)
Low (-) (never/rare)	Smoking	High (+) (often)
No (-) (never)	Drunkenness	High (+) (often)
Low (-) (never/once)	Bulling (bully/victim)	High (+) (often)

FIGURE 2. Criteria for adjustment (good/poor)

Behavioral and emotional problems are examined by analysis of the following items:

- **Smoking** (frequency of smoking)*: "How often do you smoke tobacco at present?"* Response categories are: *Every day; At least once a week, but not every day; Less than once a week; I don' smoke;*
- **Drunkenness** (frequency of drunkenness): "*Have you ever drank so much alcohol that you were really drunk?*" Response categories are: *No, never: Yes, once; Yes, 2-3 times; Yes,4 to 10 times; Yes, more that 10 times.*
- **Involvement in bullying** (two questions): "*How often have you been bullied at school in the past couple of months?*" and "*How often have you taken part in bulling another student(s) in the past couple of months?*" Response options: *I haven't been bullied or bullied another student(s) at school in the past couple of months; It has only happened once or twice; 2 or 3 times a month; About once a week; Several times a week.*
- **Health complaints**: "*In the last 6 months how often have you had the following: Headache; Stomach-ache; Back-ache; Feeling low; Irritability or bad temper; Feeling nervous; Difficulties in getting to sleep; Feeling dizzy?*" Response options are: *About every day; More than once a week; About every week; About every month; Rarely or never.*

The positive aspects of adjustment: life satisfaction and competence (good academic achievement) are measured in the following way:

- **Life satisfaction**: By using Cantril's 10-grade ladder: the top indicates the best possible life, and the bottom – the worst possible life. *"Here is a picture of a ladder. The top of the ladder 10 is the best possible life for you* and *the bottom – 0, the worst possible life for you. In general, where on the ladder do you stand at the moment?* A score 6 or more is defined as positive level of life satisfaction.
- **Good academic achievement:** "*In your opinion, what do your class teachers think about your school performance compared to your classmates?*" Response options are: V*ery good; Good; Average; Below average.*

Good adjustment is defined on the basis of several criteria, which form a composite index of adjustment (Orkenyi, et al. 2007):

1. At least 6 points on the life satisfaction scale
2. Health complaints: *Rarely or never.*
3. Academic achievement: "V*ery good" and "Good"*
4. Non-smoking;
5. Drunkenness: "*No, never";*
6. Involvement in bullying: Being involved no more than once in bulling (as a bully or as a victim) ("*I haven't been bullied or bullied another student(s) at school in the past couple of months"* and "*It has only happened once or twice").*

Psychosocial Predictors of Positive Adaptation:

1. Family: Family structure, socio-economic status, communication with parents are studied as factors influencing adolescents' adaptation.

- **Family structure** – registers if the child lives with both parents, in a single parent family, or in step-family.
- **Family affluence state (FAS)** is measured by an index from the general sum scores, according to the answers to the following questions: *"How many computers does your family have"; "Does the family own a car, a van, a pick-up truck or 4– wheel drive?"; "Do you have a room of your own?"; "Over the past 12 months, how many times did you travel somewhere with your family on holidays or vacations?"*
- **The quality of parent-child communication** is measured by using the question: *"How easy is it for you to talk to the following persons about things that really bother you? Father/Mother."* The response options are: *"Easy", "Difficult", "Very difficult".*

2. School: Schoolwork pressure and classmates' support are studied as predictors for adolescents' adaptation.

- **Schoolwork pressure:** *"How pressured do you feel by the schoolwork you have to do".* The response options are: *"Not at all; A little; Some; A lot"*
- **Classmates' support:** measured by three statements: *"The students in my class enjoy being together"; "Most of the students in my class are kind and helpful"; "Other students accept me as I am".* The response options are: *"Strongly agree"; "Agree"; Neither agree nor disagree"; "Disagree"; "Strongly disagree".*

3. Peers: Frequency of contacts with friends outside school. They are focused on informal relations within the social network.

- **Time spent with friends** is measured by two questions: *"How many days a week do you usually spend time with friends right after school?"* (response options: 0 to 5 days) and *"How many evenings per week do you usually spend out with your friends?"* (response options: 0 to 7 evenings).

Self-efficacy and Social competency as moderators between the psychosocial factors and the level of adjustment are studied. The are operationalized in the following way:

- **Self efficacy:** Includes 10 statements such as: *I am sure that I can achieve my objectives; I can cope with anything standing in my way; I can solve most problems if I make the necessary efforts, etc.,* The response options are: *Totally untrue, Untrue to a certain extent, True to a certain extent, Totally true.*

◈ **Social competency:** Includes10 statements such as: *It is difficult for me to make friends; I have a lot of friends; I feel accepted by the others, etc.,* The response options are four from "*Totally untrue*" to "*Totally true.*"

RESULTS

1. Proportions of poor adjustment in adolescents according to gender and age

The distribution of poor adjustment according to gender in the three age groups is different:

The percentage of adolescents with poor adjustment significantly increases with age: starting from 19,4% in 11 years olds through 31,7% in 13 years olds to 48,9% in the 15 years olds;

◈ in the 11 year old group, the boys who have poor adjustment are more than the girls, but in the other two age groups (at the age of 13 and 15) the number of girls with poor adjustment is prevailing;

◈ girls show increasing rates of poor adjustment with age: at the age of 13 the number children with poor adjustment increases twice and at the age of 15 – more than three times, compared to 11 years olds; in boys this tendency of increase is more gradual.
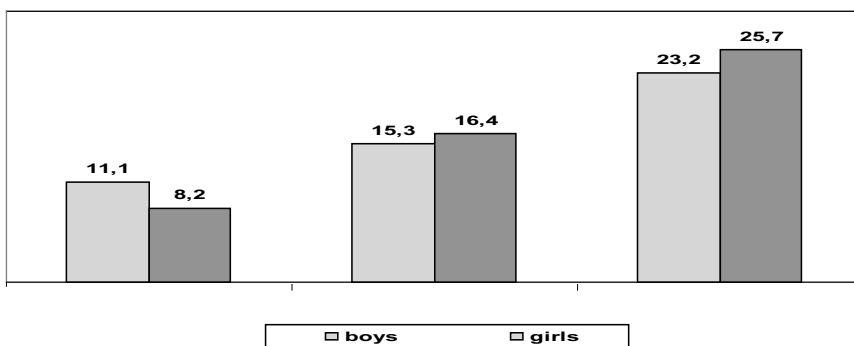
FIGURE 3. Poor adjustment according to gender in three age groups (%)

2. Psychosocial predictors (family, peers, school) as factors influencing the level of adjustment.

Results from the logistic regression indicate that family, peers, school as a whole are factors influencing adjustment. Specifically, a significant influence on the ad-

justment of schoolchildren have: gender, age, family structure, family affluence, quality of communication with parents, contacts with friends, classmates' support, and school pressure.

TABLE 1. FACTORS INFLUENCING THE ODDS FOR ADJUSTMENT: (0=GOOD; 1=POOR)

Factor	B	Sig.	Exp(B)
Gender: girl (boy)	-,28	,000	,75
Age: (11 years)			
13 years	,72	,000	2,06
15 years	1,47	,000	4,37
Communication with parents: (easy) difficult	,73	,000	2,08
Classmates' support: (strong) weak	,50	,000	1,66
Contacts with friends: (often) rare	-,49	,000	,608
FAS family affluence scale:			
(low) medium	-,31	,000	,73
high	-,21	,042	,81
Family structure:			
(both parents) single parent	,26	,137	1,30
step family	,40	,082	1,50
School pressure: (low) high	,72	,000	2,06

In brackets are given the basic categories; B – influence of factors on the dependent variable; Sig. – significance of the influence; Exp(B) – quantitative representation of the factors influencing odds of life satisfaction.

- **Gender:** The chance of poor adjustment is lower in girls compared to boys (odds decrease with 25%);
- **Age:** The chance of poor adjustment increases significantly with age (two times in 13 years olds and more than four times in 15 years olds);
- **Family structure:** Children who live with one parent have significantly higher odds of poor adjustment (1,3 times of increase), compared to those living with both parents;
- **FAS:** in children with medium FAS, the chance of poor adjustment decreases with 27% compared with those with low FAS;

The same tendency show children with high FAS, but at a lower level (19%);

- **Communication with parents:** in those adolescents who have difficulties communicating with parents, the chance of poor adjustment doubles compared to children with good communication;
- **School pressure:** Odds of poor adjustment in adolescents with higher level of school pressure are double compared to those with low school-work pressure;
- **Classmates' support:** Children who do not feel support from their classmates have a lower probability of having positive adjustment (their odds of poor adjustment increase 1,6 times);
- **Contacts with friends:** Adolescents who have rare contacts with friends show better adjustment (their odds of poor adjustment decrease with 40%) compared to peers who contact regularly with friends.

3. Self-efficacy and social competency as moderators between the psychosocial factors and the level of adjustment.

Our last task was to examine the role of self-efficacy and social competence as moderators between the psychosocial factors and the level of adjustment. First we tested the correlation between these two personality variables, how they are related to some factors of adjustment, as well as to the level of adjustment.

The results from the correlation analysis showed the following significant correlations:

- Social competency and self-efficacy have positive interrelation;
- Social competency is positively connected with the family affluence (FAS);
- Poor adjustment is positively related to age (students aged 13 and 15 have more difficulties compared to 11 years olds)
- Poor adjustment is positively connected with pressure by the school work

Social competence and self-efficacy were tested as moderators between the psychosocial predictors of adjustment and poor adjustment. The results from the statistical analysis showed that social competence is not a buffer between the independent factors of adjustment (the variables included in the factors: family, school, peers) and poor adjustment.

Only **self-efficacy** proves to be a moderator of the effects of school pressure (by schoolwork) on poor adjustment: adolescents with high level of self-efficacy adapt more successfully to school-work pressure (have lower maladjustment outcome), compared to those with low self-efficacy.

TABLE 2. CORRELATION MATRIX BETWEEN SELF-EFFICACY, SOCIAL COMPETENCE, FAS, ADJUSTMENT, FAMILY STRUCTURE AND SCHOOL PRESSURE.

	Age	Gender	Self Efficacy	Social Compe-tence	FAS Family Affluence Scale	mal-adjus-tment	Family stru-cture
Age Pearson Corr.	1						
Sig. (2 tailed)							
Gender Pearson Corr.	.026	1					
Sig. (2 tailed)	.071						
Self– Pearson Corr.	.016	.069(**)	1				
Efficacy Sig. (2 tailed)	.263	.000					
Soc. Pearson Corr.	-.019	.029(*)	**.358(**)**	1			
Compet. Sig. (2 tailed)	.196	.046	.000				
FAS Pearson Corr. Sig. (2 tailed)	-.048(**)	-.091(**)	.092(**)	**.197(**)**	1		
	.001	.000	.000	.000			
Mal– Pearson Corr. **adjust.** Sig. (2 tailed)	**.379(**)**	-.017	-.100(**)	-.111(**)	-.077(**)	1	
	.000	.248	.000	.000	.000		
Family Pearson Corr. **structure** Sig. (2 tailed)	-.061(**)	.020	.040(**)	.056(**)	.046(**)	-.126(**)	1
	.000	.167	.006	.000	.002	.000	
School Pearson Corr. **pressure** Sig. (2 tailed)	.110(**)	.093(**)	-.111(**)	-.120(**)	-.058(**)	**.229(**)**	-.016
	.000	.000	.000	.000	.000	.000	.285

** Correlation is significant at the 0.0-level (2 tailed).

CONCLUSIONS

The goal of our analysis was to examine the social contexts of adolescents' life – family, peers and school as predictors of adjustment. For that purpose we tried to define adjustment including data of adolescents' functioning measured within the Bulgarian HBSC 2005/2006 survey.

Our results show that adjustment is not common in adolescence: the percentage of adolescents with poor adjustment increases with age. This may be explained by the fact that adolescence is marked by rapid and often dramatic intra-individual changes and also by transformations in the family, peer group and school, the contexts in which children live.

The results from the logistic regression prove that family structure and family affluence; quality of communication with parents, contacts with friends, classmates' support, school pressure are factors that significantly influence adjustment of schoolchildren.

Repeated exposure to developmentally inappropriate and unsupportive social contexts can undermine the coping skills and healthy development in adolescents. Children living in a single-parent family or in a stepfamily can experience destruction of family functioning and parent-child relationships: lower parental monitoring and lower parental involvement. Adolescents living in low FAS families are at risk for having emotional and behavioural problems.

Self-efficacy and social competency as personality characteristics have a positive intercorrelation, though they were not moderators between the psychosocial factors and the level of adjustment. The only exception concerns self-efficacy as having a buffering effect on the influence of school work pressure on adjustment.

As a whole, our results confirm that parent-child relations, school environment and peer relations may predict good/poor adjustment. There is empirical evidence supporting the connection between socialization experience in these different developmental contexts and psychological adjustment.

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RELATIONSHIP BETWEEN ACADEMIC SELF-REGULATION, ACADEMIC ACHIEVEMENT AND HEALTH

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Abstract. *The aim of this study was three-fold: first, to determine the existence of a self-determination continuum in our socio-cultural conditions on an academic level, second, to determine the relationship between the academic self-regulation and the academic achievement, and third, to determine the relationship between the academic self-regulation and health. The study was performed on a sample of 217 first and second year students (159 female and 58 male) of biology and medicine. The following measurement instruments were used: Self Regulation Questionnaire-Academic (SRQ-A, Ryan and Connell, 1989), subjective evaluation of psychical and physical health and grade in test. The obtained results point to the following: In our socio-cultural conditions, on an academic level, there can be registered an existence of a self-determination continuum that the Deci-Ryan's theory anticipates. There is a positive correlation between autonomous motivation and the grades in test. Intrinsic motivation and the college that the students attend are significant predictors for academic achievement. There is a positive correlation between autonomous motivation and health. The students with autonomous motivation had a better subjective evaluation of psychical and physical health than the students with controlled motivation. These results are discussed with reference to Deci and Ryan's (1985, 1991) self-determination theory.*

Keywords: *Self-regulation, academic achievement, self-determination continuum, health*

INTRODUCTION

Self-determination theory (SDT) is a general theory of human motivation and is concerned with the choices people make with their own free will and full sense of choice, without any external influence and interference. SDT focuses on the degree to which an individual's behavior is self-endorsed and self-determined (Deci & Ryan, 2000). Deci & Ryan (1987) define extrinsic motivation as the performance of an activity in order to attain some separable outcome and, thus, contrasts with intrinsic motivation, which refers to doing an activity for the inherent satisfaction of the activity itself. Unlike some perspectives that view extrinsically motivated behavior as invariantly nonautonomous, SDT proposes that extrinsic motivation can vary greatly in its relative autonomy (Ryan & Connell, 1989; Vallerand, 1997). At the far left of the self-determination continuum (Figure 1) is amotivation, the state of lacking the intention to act. To the right of amotivation are five classifications of motivated behavior. At the far right of the continuum is the classic state of intrinsic motivation. It is highly autonomous and represents the prototypic instance of self-determination. Extrinsically motivated behaviors, by contrast, cover the continuum between amotivation and intrinsic motivation, varying in the extent to which their regulation is autonomous. First to the right of amotivation is external regulation, the extrinsically motivated behaviors that are least autonomous. A second type of extrinsic motivation is labeled introjected regulation. Introjection involves taking in a regulation but not fully accepting it as one's own.
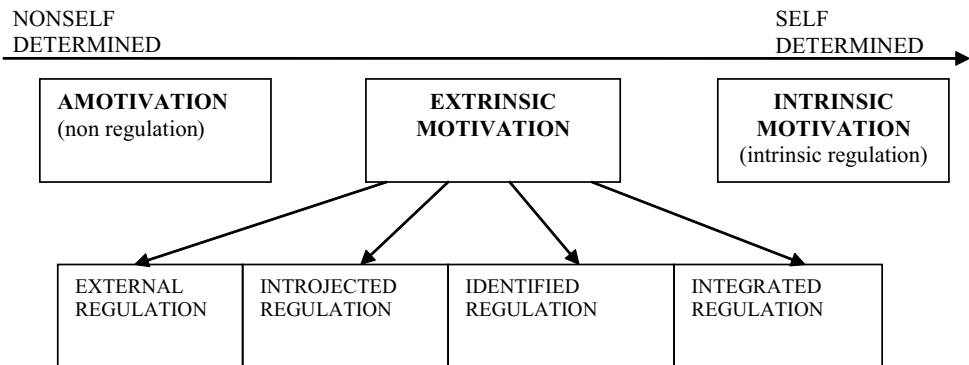
FIGURE 1. THE SELF-DETERMINAT IN CONTINUUM (Deci & Ryan, 1985)

In some studies, external regulation (being interpersonally controlled) and introjected regulation (being intrapersonally controlled) have been combined to form a controlled motivation composite. A more autonomous, or self-determined, form of extrinsic motivation is regulation through identification. Identification reflects a conscious valuing of a behavioral goal or regulation, such that the action is accepted or owned as personally important. Finally, the most autonomous form of

extrinsic motivation is integrated regulation. Integration occurs when identified regulations are fully assimilated to the self. In some studies, identified, integrated, and intrinsic forms of regulation have been combined to form an autonomous motivation composite. As people internalize regulations and assimilate them to the self, they experience greater autonomy in action.

Ryan & Connell (1989) have tested assumptions of the motivation continuum and they have determined four types of extrinsic motivation. Students with external regulation had been less interested in homework and more prone to blame others for negative outcomes. Students with introjected regulation put in more effort, but they were anxious and had problems coping with failure, while students with identified regulation enjoyed school more and had more positive coping style with different outcomes. Intrinsic motivation was connected with interest, pleasure, competence and positive coping. Other research has shown that autonomous academic motivation is positively associated with academic achievement (Connell & Wellborn, 1990; Fortier, et al., 1995; Grolnick, Ryan, & Deci, 1991; Guay & Vallerand, 1997; Miserandino, 1996; Ratelle, et al., 2007), task persistence, effort, and enjoyment (Ryan & Deci, 2000; Vansteenkiste et al. 2004; Waterman 2005) lower dropout rates (Ryan & Deci, 2000), high quality of learning (Grolnick & Ryan, 1987; Ryan & Deci, 2000) and better psychological well-being (Sheldon & Kasser, 1995; Levesque et al., 2004). Studies have shown that external rewards, such as grades, tend to undermine intrinsic motivation in the academic setting (Deci, 1971; Deci et al., 1999).

The researches have consistently shown that autonomous motivation is a strong predictor of success in college studies and of psychological health (Black & Deci, 2000; Deci et al., 2006). It was also shown that relevant educational outcomes are related to intrinsic motivation and a well internalized extrinsic motivation (Yi-Guang Lin & McKeachie, 1999). Sviben (2006) found that autonomous motivation is a significant contribution to academic achievement and Goldin's research (2007) shows that intrinsic regulation is a significant predictor of school success among girls, while among boys the significant predictors of success in school are the external, identified and intrinsic regulation.

Autonomous motivation is also reliably related to psychological health. Maltby & Day (2001) have shown positive association intrinsic motivation for exercise with psychological health. Ratelle et al. (2004) have shown that people with higher level of self-determination have reported better mental health.

Standage & Treasure (2000) tested the motivation continuum. They confirmed previous studies and got a simple correlation matrix between subscales on SIMS (Situational Motivation Scale), i.e. the SIMS subscales were distributed along the self-determination continuum.

As it was mentioned in the previous text, many researches have dealt with motivation, psychological health and academic achievement and the majority of

them have been done in the USA. With the exception of a few graduation theses (Ćuk, 1990; Košanski, 2004; Goldin, 2006; Sviben, 2006) that have dealt with a similar problem area, there has been no research done in our country that would examine the self-determination theory, i.e. the correlation between the degree of autonomy, academic achievement and psychological health. In order to verify the results of previous researches on our population, we decided to do our research on correlation between academic self-regulation, academic achievement and psychological health. The aim of this study was three-fold: to determine the existence of a self-determination continuum in our socio-cultural conditions on an academic level, to determine the relationship between the academic self-regulation and academic achievement, to determine the relationship between the academic self-regulation and health.

METHODOLOGY

PARTICIPANTS AND PROCEDURE

The participants were first and second year students of biology and medicine. Two hundred and seventeen students (58 male and 159 female) volunteered to participate in the study. Their ages ranged between 18 and 23 years. Questionnaires were administered to the students during a class period. At least one researcher was present during data collection. The students had approximately 45 min to complete the surveys. Anonymity was guaranteed. The survey was conducted a few days before the end of the lectures in a course. After they have taken the exam their grades were collected and used as a measure of academic achievement.

INSTRUMENTS

For the present study we made a special form which was used to collect data such as: gender, faculty and year of study. Students also needed to fulfill the SRQ-A (Self Regulation Questionnaire-Academic; Ryan & Connell, 1989) and give their subjective evaluation of psychological and physical health. At the end we collected the grades in test.

The SRQ-A consists of 32 multiple-choice questions (7 alternatives, Lickert type). The variables of sum are formed accordingly: the external, the introjected, the identified and the intrinsic motivation regulation. A Relative Autonomy Index (RAI) has been formed using weighted variables of sum in the formula. RAI describes the level of autonomous behavior: the higher positive RAI, the more autonomous, the higher negative RAI, the more non-autonomous. The validity of the variables of sum was studied by comparing the correlations. The result was logical: the more external variables correlated higher with each other and the more intrinsic variables correspondingly with each other. The introjected and the iden-

tified settled in between the external and the intrinsic variables, as was expected. The reliabilities of the variables of sum were good showing sufficient internal consistency (Cronbach's alphas .78– .84).

RESULTS

DESCRIPTIVE STATISTICS

TABLE 1. MEANS AND STANDARD DEVIATIONS FOR DIFFERENT TYPES OF MOTIVATION, ACADEMIC ACHIEVEMENT AND HEALTH REGARDING GENDER

Gender	Female (N=159)		Male (N=58)		
	M	SD	M	SD	t-test
external regulation	3,90	1,22	3,78	1,33	-,61
introjected regulation	4,05	1,09	3,73	1,10	-1,86
identified regulation	5,65	0,98	5,45	1,65	-1,07
Intrinsic motivation	4,39	1,21	4,01	1,28	-2,00*
controlled motivation	3,98	1,09	3,78	1,13	-1,18
autonomous motivation	5,02	0,99	4,73	1,29	-1,76
academic achievement	3,18	1,47	2,51	1,46	-2,71**
psychological health	86,08	14,63	85,42	21,30	-.22
physical health	83,96	16,87	83,57	21,93	-.11

* Significant at the 0.05 level (two-tailed)
**Significant at the 0.01 level (two-tailed)

EXPLORATORY FACTOR ANALYSIS

Exploratory factor analysis (method principal components, varimax rotation) have show extraction of 8 factors which have eigen values more than 1 and explained 68,80 % of overall variance. Given factor structure show 2 dominant factors (explained 40% of variance) and other factors have small eigen values and very small proportion of explained variance. First factor explained 28,009 % of overall variance and second factor explained 12,605 % of overall variance.

CONFIRMATORY FACTOR ANALYSIS

The structure we tested was supposed to rely on four factors, namely the following: external regulation, introjected regulation, identified regulation and intrinsic motivation. We interpreted the saturation more than 0,3 and we managed to interpret the four mentioned factors. The first two of these factors have most saturation for external and introjected regulation and combining them we inter-

preted controlled motivation. The last two of these factors have most saturation for identified regulation and intrinsic motivation and combining them we interpreted autonomous motivation. Although all items were not distributed as SRQ-A presumed, most items were confirmatory with SRQ-A assumptions.

SIMPLEX PATTERN

Correlations among the different types of motivation are shown in Table 2. The correlations between the variables appear to be in conformity with a simplex ordered matrix, although we found some small deviations from this presumed pattern. For example, external regulation displayed a more important relationship with intrinsic motivation (.28) than with identified regulation (.24), although it was a very small difference and not significant.

TABLE 2. SIMPLE CORRELATION MATRIX FOR DIFFERENT TYPES OF MOTIVATION

	External regulation	Introjected regulation	Identified regulation	Intrinsic motivation	Controlled motivation	Autonomous motivation
External regulation	1	.76**	.24**	.28**	.95**	.26**
Introjected regulation		1	.33**	.45**	.94**	.43**
Identified regulation			1	.60**	.35**	.89**
Intrinsic motivation				1	.31**	.93**
Controlled motivation					1	.35**
Autonomous motivation						1

** Correlation is significant at the 0.01 level (two-tailed)

CORRELATION ANALYSIS

As we expected we confirmed correlation between academic achievement and different types of motivation (table 3). A statistically significant correlation was between autonomous motivation and academic achievement, and there was no significant correlation between academic achievement and controlled motivation. Highest correlation was between academic achievement and intrinsic motivation and then between identified regulation and academic achievement, although both correlations were rather small.

TABLE 3. CORRELATION MATRIX FOR DIFFRENT TYPES OF MOTIVATION AND ACADEMIC ACHIEVEMENT

	Academic achievement
External regulation	.12
Introjected regulation	.14
Identified regulation	.33**
Intrinsic motivation	.34**
Controlled motivation	.14
Autonomous motivation	.37**

** Correlation is significant at the 0.01 level (two-tailed)

As we expected we confirmed the correlation between health and different types of motivation (table 4). Correlation analysis showed positive significant correlation between psychological health and autonomous motivation, intrinsic motivation and identified regulation, although correlation coefficients were relatively small. There was no significant correlation between psychological health and controlled motivation, introjected and external regulation. Also, there was statistically significant positive correlation between physical health and autonomous motivation, intrinsic motivation and identified regulation, although correlation coefficients were also small. There was no significant correlation between physical health and controlled motivation, introjected and external regulation.

TABLE 4. CORRELATION MATRIX FOR DIFFERENT TYPES OF MOTIVATION AND HEALTH

	Physical health	Psychological health
External regulation	-.08	.09
Introjected regulation	-.01	.08
Identified regulation	.18*	.18*
Intrinsic motivation	.24**	.20**
Controlled motivation	-.05	.09
Autonomous motivation	.23**	.21**

* Correlation is significant at the 0.05 level (two-tailed)
** Correlation is significant at the 0.01 level (two-tailed)

As we expected to have students with autonomous motivation and controlled motivation we calculated RAI. There were 131 students with autonomous motivation and 46 students with controlled motivation. Also the span of results for students with autonomous motivation was bigger (from 0 to 16,37) than the span of results for students with controlled motivation (from – 6,05 to 0).

DISCUSSION

The present study had three goals: a) to determine the existence of a self-determination continuum in our socio-cultural conditions on an academic level, b) to determine the relationship between the academic self-regulation and the academic achievement, c) to determine the relationship between the academic self-regulation and health.

Ryan & Connell (1989) tested the self-determination continuum assumptions. The results showed existence of four types of motivation regulation. The correlations between the different types of motivation have shown that the four types of motivation regulation lie along the continuum, i.e. the interrelationships among the four subscales of the SRQ-A, as expected, formed a simplex pattern in which those subscales adjacent along the continuum correlated more positively than those more distal along the continuum. Aligned with previous research (Ryan & Connell, 1989; Guay et al., 2000; Standage et al., 2000; Treasure et al., 1999; Vansteenkiste et al., 2005), the results of the present study provide further empirical support for the simplex-like pattern of relationships among the SRQ-A subscales. This pattern of significant correlations suggests that the SRQ-A does capture multidimensional motivation in line with the theoretical tenets proposed by Deci & Ryan (1985, 1991). Moreover in our research we have affirmed with the use of confirmatory FA the existence of four factors that we can interpret as: external regulation, introjected regulation, identified regulation and intrinsic motivation. With that we managed to give an answer to the first problem that SDT deals with, i.e. we established the fact that also in our socio-cultural conditions and on an academic level we can register the existence of the self-determination continuum predicted by the Deci-Ryan (2000) theory.

Previous research within the SDT tradition has shown convincingly that an autonomous, relative to a controlled, regulation of study activities is associated with various positive learning outcomes and has thereby provided evidence for the claim that the quality of students' motivation matters (Reeve et al., 2004). When internally regulated students are more task oriented, more excited about the course, use more deep level learning strategies, persist more, and perform better (Connell & Wellborn, 1990; Fortier et al., 1995; Grolnick et al., 1991; Guay & Vallerand, 1997). When externally regulated on the other hand, students adopt more approach and avoidance ego goals, study less regularly, show less excitement, persist less, use more surface level strategies and perform worse (Miserandino, 1996; Ratelle et al., 2007). In line with the SDT (Deci & Ryan, 1985, 2000), we found that students whose behavior is autonomously motivated had better academic achievement than students with controlled motivation. We found significant positive correlation only between academic achievement and autonomous types of motivation, and there is no statistically significant correlation between academic achievement and controlled types of motivation. These results are consistent with

the starting assumption and former studies (Sviben, 2006). This may imply that grades are not an important recognition standard or that they are not viewed as a true indicator of ability, perhaps because grades are not consistently applied. That is, students may receive differing messages from parents and peers with regard to the meaning or importance of grades, and professors are notoriously variable in their grading standards. Additionally, students may choose to withdraw from the university in order to avoid creating a poor academic record for themselves. In the present research we used RAI, because it is a more precise measure of motivation than the subscale of different types of motivation. The results have shown that the majority of students have the autonomous motivation, while the students with a controlled motivation, besides being less in number, have also a smaller span of results which could have affected the failure to get a correlation between controlled motivation and academic achievement. Our results indicate that the motivation in college is rather self-determined and that the autonomous style of motivation regulation is the prevalent one, which is in accord with previous research (Sviben, 2006). The findings also support the SDT claim that intrinsic motivations and integrated extrinsic motivations are related to achievement (Ryan & Deci, 2000). Black and Deci (2000) reported that the autonomous motivation for taking a particular course was not predictive of students' grades in that course. The current study may have produce significant findings because participants were asked to respond based on "subject that they are listening these weeks" and we took grade form that subject as measure of academic achievement. Our results were opposite to Black & Deci (2000) ones. Maybe this is because reasons for taking a course and reasons for participating in the class are not necessarily the same. Taking the course is a decision made prior to or early in the semester, when registering for the course. The decision to participate is an ongoing one throughout the course of the semester. This is consistent with the reported results of others who have examined the relationship between self-determination and academic achievement (Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). In present research correlation was highest between the intrinsic motivation and academic achievement which confirms the theoretical assumptions. This is in concordance with the previous results (Reeve, 2002; Wiest et al., 1998).

Aligned with previous research (Maltby & Day, 2001; Ratelle et al., 2004; Sheldon & Kasser, 1995; Levesque et al., 2004) the results of the present study provide further empirical support for positive correlation between autonomous types of motivation and physical and psychological health. As we expected, the highest correlation was between intrinsic motivation and health (both physical and psychological), although rather small. There could be a few reasons for that. First, the participants were college students, whose responses may not be generalizable to other age or cultural subgroups. A second concern is that our variables were based on self-report. It will be important in future studies to tie indices of

both motivation and health to observable variables such as behavioral manifestations or objective tests of health. The advantage of the autonomous motivation over the controlled was found by Black & Deci (2000) and Levesque et al. (2004) who have discovered that the autonomous motivation influences the enhancement of psychological health. In concordance with earlier findings (Vallerand et al., 1995; Vallerand & O'Connor, 1989), the present study has shown that individuals motivated in a self-determined way were those reporting a more positive psychological and physical health. The results make theoretical contributions to SDT (Deci & Ryan 2000). Recent studies on SDT have begun to highlight the critical role that internalization and integration play in psychological and physical well-being (Burton et al., 2006; Deci & Ryan 2000; Williams et al. 1996). Higher levels of relatedness and value are associated with integration of extrinsic behaviors, making the behaviors more intrinsic to the individual. Further study should include these findings in planning their research.

Among the limitations of this study few are especially noteworthy. The first limitation concerns the sample used in the study. Participants included in the study were 18 to 23 years of age. Further research should determine if the present results generalize to individuals from other study groups and from different age groups. Second, most of the participants were female. This is related to the educational programme we focused on: biology and medicine. However, as other findings collected with both genders show similar patterns (Simons et al., 2003), we are confident that the role of the future will not be fundamentally different for men. Although it is important to mention that some studies showed more intrinsic motivation for girls than boys, and for other types of motivation there were no differences (Baker, 2004; Sviben, 2006). Third, we only included one course in the present analysis. Specifically, some courses (e.g. anatomy or biochemistry) were perceived as highly relevant to one's future job and as internally regulated by almost everyone, whereas the opposite was true for e.g. 'Philosophy'. Had we done the analyses with these courses, the relations would be much different. On the other hand, analyses with all courses involved would have led to inconclusive results because participants were not equally distributed across the four types of instrumentality. Therefore, analyses including all courses would be confounding possible individual differences. Hence, we believe that we conducted the most informative and honest test of the theoretical statements by selecting only one course. The fourth limit concerns our use of self-report measures, which entails a possible self presentation bias in participants' answering. Future research should replicate our findings using other types of measures (e.g. implicit measures). Lastly, it is important to remember that the present study only assessed a limited number of health indicators (i.e. subjective evaluation of psychological and physical health). Future research should test the generality of the present results using other mental and physical health indicators.

CONCLUSION

Although the present study confirmed results of previous study, in our socio-cultural conditions, on an academic level, the biggest problem, as mentioned above, was generalization of these results to students population. Future research is needed, in order to further test the generality of the motivational model and their connection to academic achievement and health.

Acknowledgements

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PAPERS OF SYMPOSIUM 2: SCHOOL, EDUCATIONAL AND DEVELOPMENTAL PSYCHOLOGY

CONTENT OF SELF-CONCEPT
IN 9 AND 10-YEAR-OLD CHILDREN

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Abstract. The report reviews the results from the analysis of the Self-concept of nine– and ten-year-old boys and girls. The research was performed in 2008, using the "Who am I" methods, with the participation of 123 children – 55 girls and 68 boys. A content analysis of the received 2026 answers has been conducted.
The analysis reveals the content of children's ideas of themselves and the differences in self-descriptions and identifications at that age.

Keywords: Self-concept, content analysis, self-description, identification, nine– and ten-year-old boys and girls.

INTRODUCTION

The Self-concept is determined as a core of self-knowledge and self-awareness. Its content is usually described through a system of categories, which consist of groups of statements concerning the different spheres of activities and the various aspects of the own inner world of the personality. R. Burns points out that in the literature concerning the Self-concept, there are two detailed definitions. The first one belongs to K. Rodgers which looks into the Self-concept as consisting of mental imagery of the personal characteristics and abilities of the individual, as well as the imagery for their capabilities for interaction with other people and the environment, imagery for values, for aims and ideas which can have positive or negative aspects. Thus the Self-concept is presented as an intricately-structured picture, existing in the consciousness of the individual as a separate figure or background, as an integral characteristic, on the basis of which the individual develops an attitude to the Self and interacts with the other

people [1]. It evolves into one of the basic concepts of the Humanistic psychology. The Humanistic perspective /also called the perceptive or phenomenological/ is based on the following assumptions:

- behaviour depends on the close-up of the perception;
- the close-up in its nature is subjective;
- every perception of the individual is defined through the phenomenal field of their consciousness, in the centre of which is the Self-concept;
- the Self-concept plays the role of perception and internal nature of the individual, simultaneously;
- the Self-concept regulates the behaviour;
- the Self-concept possesses a relative stability and determines comparatively stable patterns of behaviour;
- the discrepancy between the experience of the individual and their Self-concept is neutralized with the help of mechanisms for psychological defense;
- the main incentive for every person is the striving for self-actuality[1].

The second definition belongs to Steins, in which the Self-concept is presented as a system of perceptions, images and valuations concerning the individuals themselves, which exists in the consciousness of the individual. It includes evaluative perceptions which arise as a result of the reaction of the individual towards the Self, as well as a perception of how the individual appears to the other people. The perception of the individual of what they want to be and how to behave with the others is formed on the basis of the abovementioned [1].

The experimental research into the Self-concept is also based on the ideas of W. James concerning the Integral Self. He identifies two aspects which are typical of the Self and formulates the difference between them: I – the Self-aware-reflective-processing and ME – the Self as the object, the content of the consciousness, in which, in its turn, other aspects can be specified, such as the spiritual Self, the material Self, the physical Self, the social Self.

The research of the symbolic interactionalism, one of the most widely-spread socio-psychological theories in Western Europe in the 20th century, is dedicated to the role of social interaction as a main source of the Self-concept [8]. It considers communication as an interaction, as mutually-orientated actions and reactions spread in time. The individuality, the Self, is formed in the situation of interaction between people. The play is given as a model of such a situation. The control which is exercised on the behaviour of the individual through the perception of the other people of this individual is considered as a mechanism for the formation of the individuality. In a play situation, people select for themselves

"important partners" and orientate their actions and reactions in accordance with their behaviour, namely, how the individual perceives the "partner" and how the others perceive them.

E. Ericson suggests the genetic theory for the formation of the self-identity. He finds out the core of the process of personality development in the drive of each person for searching and finding the personality wholeness, value and perspective. In order to explain these processes, he introduces the concepts identity and identification. The identity becomes a separate unit for analyzing the psychological life of the person. The identity is a victory of adolescence and the main task during this stage of the psychological development of the person is the whole awareness of the identity and our place in the world. The identity is a product of every separate identification with different people in the past [4].

The Self-concept has its inner structure [1]. It consists of: cognitive elements or perceptions of the personal characteristics and identity; valuation elements, self-esteem and the corresponding to the self-esteem attitude to the personal identity; behavioral elements.

The perceptions of the individual about themselves look convincing no matter whether they are based on objective knowledge or subjective opinions, whether they are true or false. Abstract characteristics are used for the description of a concrete person. On the one hand they depict the stable tendencies in the behaviour, on the other – the selectivity of the perception.

The evaluative elements exist on the grounds that the knowledge for the self gives rise to valuations and emotions whose intensity depend on the very cognitive content and on the context. The Self-concept is not only a statement, a description of the characteristics of the personality, but a combination of their evaluative characteristics and the experience related to them. According to Burns, the term Self-image, which is often used as a synonym of the Self-concept, does not fully represent the dynamic, evaluative and emotional character of the perception of the individual about themselves. It is connected primarily with the first, static, cognitive component of the Self-concept [1]. In cognitive psychology the Self-image and the Self-concept are looked into as "familiar introduction" of the own personality – the result of the self-knowledge, a cognitive representation [3].

The Self-concept is formed and separated during the process of the development of self-awareness. It appears as an individual reflection of the socially-conditioned requirements of the environment and it serves the consciousness to keep the personal identity in a situation of changing external conditions. The personal "Self" looks to each individual as a reality which is archetypal and obvious in itself, but it is always realized in the context of a certain opposition – e.g. "I – Not-I", "I – the Other", "I – We", "I – My", "I – I", etc. That is why the theoretical analysis of this phenomenon requires, according to И. Кон, a consideration of the theory of social attitude [6]. The social attitude facilitates the adaptation

of the personality to the environment, the self-knowledge of the personality, its self-regulation and psychological self-defense [7]. This is so because the stable system of the social attitude consolidates what contributes to the satisfying of the needs of the individual /adaptation/; puts into a system the previous experience of the interaction of the subject with the object /knowledge/; creates prerequisites for creative development and self-education of the personality / self-regulation/; allows the individual to avoid the awareness of aspects of the reality which can undermine the stability of the personality /psychological self-defense/. The various attitudes do not exist in the personality separately but are grouped in a certain hierarchical system of dispositions: sets, a system of social attitudes, basic social attitudes and a system of value orientation. It is the fact of approaching the "Self" as a socially-attitudinal system, that allows us to present its structure not as a random combination of components /perception of their body, psychological properties, moral qualities, etc./, but as a certain system of cognitive, emotional and behavioral characteristics. The emotional and cognitive components of the "Self" always exist but each of them has its own logic of development.

The Self-concept, as every psychological image, has an orientation and regulatory function on the behaviour. The adaptive behaviour is realised thanks to the correct reflection of the personal physical and psychological characteristics in the self-image. It is the self-image that determines the choice of models of behaviour, the formation of the aims and the level of claims they make. The established Self-concept supposes such a level of claims which can already be considered as a stable characteristic of the personality. It is the self-respect which is the common thing, the final dimension of the "Self", which shows the degree to which the individual accepts or does not accept their own personality. The self-respect is a stable characteristic of the personality and the keeping of a certain level of self-respect is an important, however not well realised function of the self-awareness.

The formation of the personality of a child includes the establishment of a relatively stable Self-concept, i.e., a whole perception of the Self, which is not simply an awareness of the personal qualities or a collection of separate, partial self-esteem acts. This supposes the creation of a psychological self-portrait. During the various age periods, the child realizes different aspects of the personal "Self". First of all, children become aware of their skills and practical abilities – motor, artistic, performance, etc. Far later, they realize their personality traits. This process develops after the moral and social models for self-esteem have already been acquired. Usually, it is at this stage that discrepancies between the real image / what actually the child is/ and the developing "self-image" begin. This is explained with the complexity and ambiguity of the results of the manifestation of the personality traits. The personality traits and qualities are realized in the process of

communication with adults and peers. This process is most active in primary and adolescence age.

INSTRUMENTS

The content of the Self-concept of 9 and 10-year-old children has been researched with a test called "Who am I?" [5]. This is the most wide-spread method of studying the Self-concept, by means of free answers. Through self-description in words, the main characteristics of the self-perception are expressed – role, status, psychological characteristics of the individual, description of the personal property, aims in life, etc. Some of them are more important, others are less important for the concrete personality. The significance of the elements of self-description and their hierarchy can change due to the influence of various factors – context, personal experience, the present moment. Such a kind of self-description is a way of characterizing the uniqueness of every personality [1]. The identifications of the "Self" through words give information about the various roles, activities, objects and people with which the personality has coalesced, about the contents through which the individual experiences the self [5].

THE SETTING OF THE STUDY

The study was carried out during the period of October – December, 2008. A variant of the test applicable to literate children was used. The children who participated in the study gave 20 descriptions of themselves /20 different answers to the question "Who am I?"/, for a certain period of time /20 minutes/, and it was supposed that these were the most essential elements of their perception of themselves. However, the elements of the Self-concept that were clear to the consciousness were taken out [3]. The answers were processed by means of the content analysis method.

THE TARGET GROUP OF THE STADY

The study was carried out among 123 children, aged 9-10, who were students in grades 3 and 4, in schools in the towns of Burgas and Sliven. Third-graders were 59 – 27 girls and 32 boys. Fourth-graders were 64 – 28 girls and 36 boys.

RESULTS

The question "Who am I?" has received a total of 2026 answers. The average number of answers is 16.47, which means that some of the children have had difficulties in performing the task. The total number of answers in the third grade is 934, and the average number of the answers given by the third-graders is 15.83 words. Fourth-graders have given 1092 answers and the average number of answers for

them is 17.17 words. There is a difference in the number of answers given by girls and boys, as follows: the average number of answers for the third-grade girls is 16.6 and for the third-grade boys – 15 words. In the fourth grade, the average number of answers of the girls is 18.3 words, whereas for the boys it is 16.5. Concerning the whole survey, the answers of the girls consist of 17.5 words on the average, while the boys have given answers consisting of 15.63 words on the average.

Almost 49% of the children who took part in the study have given 20 answers each, 5 children have given 17 answers, 12 children – 11 answers. Three children /2 boys and 1 girl/ have given the smallest number of answers /7 words/. All the answers have been subjected to content analysis method and categories with more than 1 answer have been identified. The analysis has been done separately for boys and girls from grades 3 and 4. They can be distributed as follows:

| third grade | girls – 33 categories | boys – 39 categories; |
| fourth grade | girls – 56 categories | boys – 48 categories. |

The analysis of the categories of words, that followed, shows that fourth-graders determine themselves through 50 categories. All the 65% of the answers are thus summed up; third-graders describe themselves through 29 categories, which sum up 82.33% of all the definitions for themselves.

The summarized categories through which the 9 and 10-year-olds describe themselves are presented in Table No1. They are totalled to 62, the smallest number of words included in a category being 3. This reduction is due to the fact that the categories with a higher frequency of the answers are more informative, and also because of the existence of words which are peculiar and cannot be categorized [5].

1478 words are included in these 62 categories, which is 73% of all the self-definitions given. They can be divided in two opposing groups – objective and subjective self-descriptions, and one intermediate group – role self-description [5]. The objective self-descriptions include characteristics through which the subject relates to groups of properties or things that are objective in its character [5]. The term "objective" in this case means that the person participating in the study is certain that the corresponding properties belong to the person in a way in which they do not depend on the person who only registers them. The subjective self-definitions are connected with groups, classes, traits, characteristics, states and activities. The role self-descriptions relate to acceptance and performance of certain expectations and activities. Twenty-nine of the categories can be related to the group of the subjective ones – these are 47% of the investigated categories, 20 are objective – 32% and 13 are role – 21%.

TABLE 1. SELF-PERSPECTIVE CATEGORIES

No	Category	Number/Frequency	%	Type
1	to love	412	20.33	S
2	girl/boy	77	3.8	O
3	with….hair	71	3.5	O
4	to want	66	3.25	S
5	schoolboy/schoolgirl	65	3.20	R
6	with……eyes	61	3.01	O
7	to like	58	2.86	S
8	tall/short	56	2.76	O
9	to have got	47	2.31	O
10	Good	44	2.17	S
11	thin/fat	40	1.97	O
12	I'm….years old/ I was born on……	40	1.97	O
13	Clever	33	1.62	S
14	beautiful/handsome	31	1.53	S
15	……..is my friend	21	1.03	O
16	sportsman/ sportswoman	19		R
17	friend	17		R
18	child	16		O
19	favourite colour	15		O
20	My name is….	14		S
21	favourite film	14		O
22	not to love	14		S
23	to hate	13		S
24	nice/kind	13		S
25	hardworking	13		S
26	Bulgarian	12		O
27	quick	12		S
28	football player	11		R
29	strong	11		S
30	I am…./something/	11		O
31	to play	10		S
32	favourite school subject	9		O
33	I live at….	9		O
34	not to like	7		S
35	cyclist	7		R
36	rabbit	7		R
37	lazy	6		S
38	basketball player	6		R

No	Category	Number/Frequency	%	Type
39	I am not……	6		O
40	studious	6		S
41	fourth-grader	5		R
42	fisherman	5		R
43	to train/ to go in for	5		S
44	I can….	5		S
45	shy	4		S
46	to dance	4		S
47	excellent student	4		S
48	My hobby is…	4		O
49	brother	3		R
50	honest	3		S
51	person	3		O
52	curious	3		S
53	lucky	3		R
54	I study at…	3		O
55	painter/artist	3		R
56	helpful	3		S
57	to know	3		S
58	to paint/ to draw	3		S
59	to write	3		S
60	amusing	3		S
61	talented	3		S
62	mathematician	3		R

The logical analysis of the categories assumes that the quantity of a certain answer /the number of answers belonging to the category/ is an indicator of its typicality. The category which contains the largest number of descriptions begins with the word "love", i.e. the 9-10-year-olds identify themselves with their attachment and the feeling of tenderness, which they experience for something or somebody. The child is, first of all, an experiencing creature and realizes itself as such – the love of the children for the others and the objects mirrors the love of the others for them. In the "Dictionary of Bulgarian Language", the word "to love" has the following meanings: to experience, to feel love for somebody or something; to feel attracted to something; to enjoy doing something; to feel pleasure; to eat and drink with pleasure and delight [2]. The analysis of this numerous category of descriptions allows for the next grouping in 17 categories which include 243 descriptions, which is 59% of all the answers, which start with the word "to love". The results are presented in Table No2.

TABLE 2. "TO LOVE" CATEGORIES

No	Categories, beginning with the word "to love"	Number of answers
1	eating, food	35
2	playing with friends	33
3	Animals	22
4	drawing/painting	21
5	playing on the computer	20
6	watching TV, films	19
7	Studying	14
8	Reading	14
9	doing sports	10
10	Nature	9
11	Mathematics	8
12	the seasons /spring, summer, winter/	8
13	cycling, rollerblading, skiing	7
14	Dancing	7
15	Swimming	7
16	Singing	5
17	Writing	4

The 9-10-year-old child shows its special, positive, emotional attitude to people, objects and activities. It likes best playing with friends, enjoys eating and drinking certain things, likes animals, computers and the TV. It studies, reads and writes and shows preferences to certain school subjects. Girls mainly love dancing, whereas boys love sports.

Second in the number of answers is the category boy/girl, i.e. gender identification. Because of the fact that studying is the leading activity at this age, the 9-10-year-old child identifies itself through its most important social role – a schoolboy/ a schoolgirl.

In the self-descriptions, there are other aspects of the studying and the school with which it relates, which it realizes and which are important for the child – studious, excellent student, favourite school subject, fourth grader, studying at school…

Next come categories which relate to the description of the appearance /the physical "Self"/ – colour of eyes; colour, haircut, length of hair; tall, short, thin, fat, and an evaluation of the physical abilities – quick, strong. In the self-descriptions there is also an aesthetic evaluation of the own appearance – handsome, beautiful. The 9-10-year-old child also defines itself through ethic and moral categories – it most often identifies itself with qualities such as kindness, diligence, generosity, honesty, but at the same time it points out that it is lazy. It is aware of, differentiates and ascribes to itself intellectual capabilities – clever, talented.

It is an undeniable fact that sport has an important place in its life, very actively at that, which is why it trains and is a sports person / football player, cyclist, basketball player/.

CONCLUSIONS

The content analysis of children's self-descriptions in this study gives us the opportunity to define which special features of the child's personality have the greatest frequency of occurrence and because of that have the greatest degree of importance in the "generalized" child's self-portrait. The 9-10-year-old child, first of all loves, does not love or hates. Secondly, it has some certain physical characteristics which position the child in space and make it different from the other children, and which the child evaluates through already acquired models of the beautiful and the ugly. Thirdly, there are certain moral qualities and evaluations which stand out in the Self-knowledge. The characteristics that relate to the school and the studying have the same importance. Gender identification comes fifth.

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THE DESIGN AND TRIAL OF A TRAINING COURSE FOR LIFE SKILLS ON ADOLESCENT WELL-BEING

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Abstract. *Within Positive Psychology and from a multidimensional perspective, total well-being refers to not only physical, but also cognitive, affective, and behavioral health as well. Wellness is a way of life oriented toward optimal health and well-being in which body, mind, and spirit are integrated in a purposeful manner with a goal of living life more fully. The purpose of this study was to examine the effects of coping skills training on adolescents well-being. 58 subjects were selected randomly, from high school students and divided in two groups.One group (34 students) was presented with a variety of lessons from coping skills, the second (24 students) was as a control group in the study. The amount of participants well-being in the pretest and posttest was measured by Adolescents Well-Being Inventory (AWBI). The AWBI measured students spirituality, self-direction, life goal, cultural identity, education/ leisure, friendship, live and physical health care as cognitive, behavior and emotion condition. Independent T test was conducted on data collected from both groups. Data revealed significant (t=8/68, P 0/01) effect on educational group in well-being. A follow-up test shown the effect is stable (t=10/73, P0/01).*

Key words: *Total Well-Being, Life Skills, Adolescents*

INTRODUCTION

Well-being is a new paradigm in counseling and positive psychology; it refers to the compatibility of human dimensions (physical, cognitive, emotional and behavioral). Each dimension has influences on the other aspects. It is an integrative model based on Adler s Individual Psychology and researches who have studied the characteristics of healthy people. Myers(1992) defined wellness as the cornerstone of the counseling profession. Myers and colleagues (2000) defined wellness as a way of life oriented toward optimal health and wellbeing in which body, mind and

spirit are integrated by the individual to live life more fully within the human and natural community. Ideally, it is the optimum state of health and wellbeing that each individual is capable of achieving (p.252). Myers, Sweeney, and Witmer(1998) believe in five tasks in a wheel with spokes that are interrelated and interacted. These tasks are (1)spirituality, (2)self-direction, (3)work and leisure,(4)friendship, and (5) love. The life task of self– direction includes 12 additional components: sense of worth, sense of control, realistic beliefs, emotional awareness and coping, problem solving and creativity, sense of humor, physical fitness, nutrition, self-care, stress management, gender identity, and cultural identity (loke, Myers, Herr ;2001).

According to Myers's paradigm, the approach of this research based on 10 factors: spiritual believes, Family Community, peer community, social compatibility, responsibility, leisure time, locus of control, purposeful manner, self care, economical situation, spending leisure time or sports, and nutrition(balanced diet).The compatibility of factors were assessed in 4 dimensions(cognitive, physical, emotional and behavioral), because each dimension has influences on the other parts. In spite of the fact that adolescence is a critical stage, well-being should be considered.

Adolescence is a period of life that puberty occurs; it is marked by biological events in which leading them to adult sized body(Berk, 2007). On the other hand, this period is also full of storm and stress for many adolescent. On average, teenager girls encounter more stress in life than teen boys do, and they tend to react more strongly to it(Majerol,2009).They prefer to spend more time with peers, accept their ideas, and conflict with family. In addition, young people complain about not knowing how to communicate their needs and emotions to others(Nasheeda,2007).These internal changes and parents expectations affect on adolescences well-being. So, life skill education is crucial to cope with challenges that they face in daily events. Life skill have been defined by World Health Organization(1997), as abilities for adaptive and positive behavior that enable individuals to deal effectively with demands and challenges in lives especially communication skills. Although learning life skills are essential during life span, the application of primary preventive stress management programs in late childhood and early adolescence is more effective(Hampel, 2007). The program of life skill education is a category of self development. Skills include feeling good about increasing internal locus of control, interpersonal communication skills, negotiation/refusal skills, empathy, assertive skills, decision making / problem solving skills, skills for managing stress, critical/creating thinking skills. To engage adolescents with skill processing actively, the intervention of life skill is based on active learning, role playing, brainstorming, voicing out opinion, group working, free discussions, and physical exercise.

METHODS

Participations:

Sample included 63 adolescent girls selected randomly from Tehran high school. They answered Adolescents Well-Being Inventory and Goldberg General Health, participants were divided to two groups. A variety of life skill education were prepared for one group(36 students); they had 10 sessions(as an experimental group); each session was about 120 minutes. Twenty-seven students who didn t learn special skills, were control group. Finally, the data from 58 subjects was analyzed.

Experimental life skill education:

In the first session, experimental group became acquainted with class laws that they themselves suggested and accepted. Besides, they had aerobics exercises or physical activities in each session. For increasing their self-esteem, they counted their abilities in each domain in which they were professional or skillful. In this way, they found out how to improve their weak points. In another sessions interpersonal communication skills were taught by role playing, brainstorming, learning to show their disagreement politely with the use of appropriate I messages. Next session, they learned connective instructions (listening well, how to start and end a dialog and a relationship) and how to become more cooperative. In the fourth and fifth sessions, they became familiar with stress managing skills(emotional coping strategy and problem solving coping strategy). During sixth and seventh sessions, they learned decision making / problem solving skills (interpersonal problem solving, how to make good choices, alternative solution training, brainstorming, means-ends thinking, and setting goals). In the eighth and ninth sessions, critical/ creating thinking skills taught by explaining how to increase the curiosity and imagination, methods of problem solving, tenacity and self-confidence. In the last session, they discussed about whole sessions and answered Adolescents Well-Being Inventory and Goldberg General Health as posttest. During 10 sessions control group just talked about daily events and some times they had free discussions. Both groups answered Adolescents Well-Being Inventory and Goldberg General Health in the first and last session.

Measure:

Adolescents Well-Being Inventory was used for experimental and control groups well– being. It is composed of 60 sentences that assessing nine factors in cognitive, physical, emotional and behavioral domains. Each dimension includes 15 sentences. Test retest reliability has been found to be satisfactory (r=0.88). Moreover participants general health were assessed by Goldberg General Health.

It revealed depression symptoms, social functions, anxiety and sleep disorders in 21 questions. Correlation coefficient between two tests was (r= -0.85).

Descriptive Analysis:

All data of 58 students(34 subject of in experimental group and 24 subject of in control group) was analyzed. The pretest score revealed 89 percent of students needed to emotional release but 1.4 percent could do it. About 67% of them were happy and 30% were purposefully. Descriptive analysis revealed experimental well-being (*M=179.53 , SD=14.59)*, control group well being(*M=179/72, SD=19.34)* and follow-up well-being in experimental group(*M=201.69, SD=9.33)* (see Table 1).It showed that total well-being in pretests of two groups is approximately equal.

TABLE 1. DESCRIPTIVE ANALYSIS

	groups	Pretest		Posttest		Follow-up	
		mean	sd	mean	sd	mean	sd
Ph. D.	Ex. G	43,68	3,47	47,68	2,31	46,41	2,09
	Co G.	43,68	3,47	41,38	5,36	–	–
Em. D.	Ex. G	49,35	5,39	49,13	3,05	53,56	3,24
	Co G.	50,79	5,81	47,68	4,38	–	–
Co. D.	Ex. G	44,00	5,68	51,59	4,22	50,58	3,73
	Co G.	42,43	1,60	44,08	4,8	–	–
Be. D.	Ex. G	42,50	4,61	51,76	3,22	50,82	2,72
	Co G.	42,96	5,4	42,04	6,62	–	–
TOTAL WELL	Ex. G	179,52	14,59	206,41	10,99	201,65	9,33
	Co G.	179,72	19,34	176,62	17,07	–	–

Note: Ph.D = Physical dimension; Em.D = emotional dimension; Co.D = cognitive dimension; Be.D = behavioral dimension; TOTAL WELL = SCORE OF WELL-BEING

RESULT

Independent T test revealed (*t=8/68, P 0/01*) significant effect on educational group in total well-being(see Table 2). The effect of this course for each dimension was different. The greatest effects were on behavioral, cognitive, emotional and physical domains, respectively. It showed, although the whole well-being improved, more focus on physical domain is crucial.

The follow-up test after 5 weeks of life skill education has affected on total wellbeing/depend *t-test=10.73; P 0/01)*(see Table.3). The effect of training on each domain continued.

TABLE 2. INDEPENDED T-TEST

dimension	groups	mean	Mean minus	T-test	df	sig
Ph. D.	Ex. G	4	5,38	5,58	58	0,00
	Co G.	-1,38				
Em. D.	Ex. G	6,03	7,70	5,15	58	0,00
	Co G.	-1,06				
Co. D.	Ex. G	7,59	8,25	6,25	58	0,00
	Co G.	-0,07				
Be. D.	Ex. G	9,26	8,35	7,09	58	0,00
	Co G.	0,91				
TOTAL WELL	Ex. G	206,41	29,79	8,68	58	0,00
	Co G.	176,62				

Significant differences (p<0,05)
Note: Ph.D = Physical dimension; Em.D = emotional dimension; Co.D = cognitive dimension; Be.D = behavioral dimension; TOTAL WELL = SCORE OF WELL-BEING

TABLE 3. RESULT OF FOLLOW-UP-TEST

dimension	groups	mean	Mean minus	T-test	df	sig
Ph. D.	Ex-pre	43,63	-2,74	4,64	33	0,00
	fol	46,41				
Em. D.	Ex-pre	49,35	-4,21	5,50	33	0,00
	fol	53,56				
Co. D.	Ex-pre	44	-6,85	8,55	33	0,00
	fol	50,85				
Be. D.	Ex-pre	42,50	-8,32	11,41	33	0,00
	fol	50,82				
TOTAL WELL	Ex-pre	178,74	-22,91	10,73	33	0,00
	fol	201,64				

Significant differences (p<0,05)
Note: Ex-pre = Experimental Pretest; Fol = Follow-up

DISCUSSION

Well-being is a multi dimension perspective. This research sought to examine life skill education on adolescent girls well-being. Adolescence is a time for excitement, growth and change (Nasheeda,2007). During adolescent stage, changes are rapid and social forces have influences on adolescent development, so finding

out life skills can help them. Majerol(2009) believes teenagers encounter more stress ,especially girls. Sontag, Graber(2008) showed early matures and girls with higher levels of peer stress exhibited more problematic responses to stress. Martin, Dowson(2009) described positive interpersonal relationships, such as feeling of acceptance by teacher which is important for young people. Storch and Warner(2004) depicted relational victimization was positively associated with the fear of negative evaluation, social avoidance of general and new situations, and loneliness. According to researches, a practical pattern of life skills were designed and the data of total and different dimensions of wellbeing were analyzed. Results showed that life skill course could improve adolescent well-being. Our findings were consistent with previous researches by Hampel (2007) coping skills among Austrian adolescence. This results supported the finding of Meier and Kummel (2008)who worked on stress management training for adolescence. Holt, Tink, Mandigo, Fox(2008)showed how youth learned life skills through their involvement on a high school soccer team. It helped other researches to emphasize on physical exercises. On the other hand, Nemeth and Penckofer (2009) found that there is relationships among self-esteem, stress coping, with lower depressive mood in adolescents. Shauna and Colin(2007) revealed effectiveness of life skill programs functioning in preparation for adulthood among youth ,especially with physical disabilities.

CONCLUSION

Learning life skills to cope with challenges help individuals to feel happier and more selfconfident, seek awareness with nature and spirit, accept responsibilities for their behaviors, improve positive attitudes and follow life purposefully, manage stressful situations effectively without losing one s temper, extend communications and solve interpersonal barriers especially with parents and other peers, and finally, become a useful person for family and society.

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BULGARIAN SOJOURNER STUDENTS:
THEIR PERSONALITIES, VALUES, AND IMAGES OF
THE HUMAN BEING IN A GLOBAL PERSPECTIVE

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Abstract. *After the political turnover some 20 years ago, many young Bulgarians and their agemates from other South-East European countries have sought tertiary education at universities in Western Europe and North America. At the private Jacobs University Bremen, Bulgarians are the largest non-German group in a student body encompassing individuals from almost 100 nations. The study reported here surveyed 193 students of that university who come from over 40 different countries. Data on the Big Five (Costa & McCrae), Social Axioms (Leung & Bond), and Hierarchic Self-Interest (HSI; Hagan et al.) were obtained. Analyses of variance were performed after grouping respondents into eight cultural regions in accordance with Inglehart's suggestions. In a second analytic step a prediction model of HSI (a second-order construct comprising of first-order indicators of individualism, materialism, social comparison orientation, Machiavellism, and acceptance of social inequality, thereby being a measure par excellence of an internalization of capitalist values) is presented. The model explores the role of personality and social axioms as predictors of HSI and focuses on differences between South-East Europeans and students from other parts of the world, utilizing Schwartz's culture-level value measures as a means to decompose culture's impact on individual-level HSI.*

INTRODUCTION

Highlighting the contrast between Bulgarian and other sojourner students from around the world, the present research explores to what extent and how the culture of upbringing forms individual value orientations. Many young Bulgarians and their agemates from other formerly communist countries have sought tertiary education at universities in Western Europe and North America. At the private Jacobs University Bremen, Bulgarians constitute the largest non-German group in a student body encompassing individuals from almost 100 nations.

In times of globalizing tertiary education sojourner students, i.e., students who travel to a country other than their country of upbringing to pursue an academic degree have become a noticeable quantity in the US, Canada, Australia, New Zealand, the UK, Germany, the Netherlands, or Singapore, to arbitrarily name a few countries that offer prestigious university degrees.

In view of the authors multicultural academic institutions are an ideal setting to explore the interrelation of the value climate typical for the culture of upbringing and individual value orientations.

The present research offers two propositions for understanding the impact of culture on the formation of individual value orientations. *First*, it is proposed that the prevalent value climate in the culture of upbringing impacts (a) the relative prevalence of personality traits and (b) the prevailing images of the human being that individuals who were brought up in a given culture hold. *Second*, depending on who one *is* (personality) and what one thinks about *how* fellow human beings are (images of the human being), individuals develop their personal value orientations. The authors do not assume a direct impact of the prevalent value climate of a culture on individual value orientations. Rather, it is assumed that the value climate—experienced by a sojourner student in his/her culture of upbringing—impacts the development of personal value orientations through the mediation of personality traits and images of the human being that the value climate fosters.

The paper relies on Schwartz's (2006) culture-level theory of values for the conceptualization of the prevalent value climate in the culture of upbringing. Schwartz's theory sees cultures as differing along three dimensions: (1) *embeddedness* (individuals being expected to seek fit with relevant collectives) as opposed to *affective* and *intellectual autonomy* (individuals being expected to seek their own good fortune); (2) *mastery* (individuals being expected to modify the given life-context at their own deliberation) as opposed to *harmony* (individuals being expected to fit in with natural life-circumstances); and (3) *hierarchy* (individuals being expected to accept a given hierarchic social order) as opposed to *egalitarianism* (individuals being assumed to all have equal rights).

Following the first proposition, the dimensions embeddedness-autonomy, mastery-harmony, and hierarchy-egalitarianism prevalent in the sojourner students' culture of upbringing foster (a) certain personality traits and (b) certain images of the human being. Personality traits can best be distinguished on the basis of Costa and McCrae's (1992) Big Five approach that derives five descriptors of variability in personality. These are (1) *agreeableness* (being compassionate and cooperative rather than suspicious and antagonistic towards others); (2) *conscientiousness* (showing self-discipline, acting dutifully and aiming for achievement); (3) *extraversion* (exhibiting energy, positive emotions and seeking stimulation in the company of others); (4) *neuroticism* (emotional instability); and (5) *openness* (appreciating art, emotion, adventure, curiosity). As to images of the human being, in terms of the old German *geisteswissenschaftliche Psychologie*, (cf., Spranger, 1928), they constitute the *Menschenbild* of individuals. Differences in people's *Menschenbild* are conceptualized here along the lines of the social axioms approach that distinguishes five images of the human being (Leung & Bond, 2004). These are (1) *social cynicism* (a negative view of human nature, mistrust of social institutions and disregard of ethical means for achieving an end); (2) *reward for application* (a belief that effort and knowledge will lead to positive ends); (3) *social complexity* (a belief that human behavior flexibly adapts to different life-contexts); (4) *religiosity* (a belief in the existence of supernatural forces coupled with a positive view on religious institutions); and (5) *fate control* (a belief that life events are predetermined).

In light of the second proposition, only after the cultural value climate has fostered the development of personality and *Menschenbild*, do people internalize personal value orientations. The latter are conceptualized here as individual value preferences emphasizing a hierarchy-accepting pursuit of own interests, the so-called Hierarchic Self-Interest (HSI—Hagan, Rippl, Boehnke, & Merkens, 1999). HSI resembles Sidanius and Pratto's (1999) Social Dominance Orientation; it also resembles Schwartz's individual-level higher-order value type 'self-enhancement' (Schwartz & Boehnke, 2004). Constituting a second-order construct that encompasses a number of (first-order) value orientations, HSI forms a value syndrome. It includes individualism, materialism, social comparison, Machiavellism, and acceptance of social inequality as first-order value orientations. It is, thus, a measure *par excellence* of an internalization of capitalist values, metaphorically speaking an elbow mentality.

As the current research is entirely exploratory in nature—and due to restrictions in space to further elaborate conceptual considerations—we directly proceed to the three hypotheses we intend to test:

       ⚭ The value climate of a sojourner student's culture of upbringing affects his/her personality traits.

- ⚜ The value climate of a sojourner student's culture of upbringing affects his/her images of the human being.

- ⚜ The value climate of a sojourner student's culture of upbringing does *not* directly affect his/her individual value preferences, but does so only indirectly through the mediation of personality traits and images of the human being.

The "unbeatable" advantage of a multicultural sojourner student sample for an empirical test of these hypotheses is that such a sample constitutes a microcosm of the world. This allows for testing an individual-level, 'psychological' model that nevertheless can encompass culture-level value preferences as predictors. Additionally, such a model can be tested without having to collect data from large samples from numerous countries.

As to Hypotheses 1 (H1) and 2 (H2), sojourner students will be assigned to eight cultural regions of the world as suggested in the work by Inglehart and Welzel (2005). These authors present evidence from the World Value Survey (WVS), which suggests that eight distinguishable cultural regions of the world differ along two dimensions of value preferences. The first dimension represents the preference for survival values (emphasis on material well-being) as opposed to self-expression values (SE—emphasis on personal growth), whereas the second dimension constitutes the opposition of preferences for traditional values (emphasis on preservation of traditions and religious beliefs) versus secular-rational values (SR—emphasis on rationality and distance to religion). The eight cultural regions of the world can best be labeled as 'Protestant Europe' (SE_+/SR_+), 'Confucian Countries' ($SE_\pm/SR_+$), 'Ex-Communist Countries' ($SE_-/SR_{\pm/+}$), 'Catholic Europe' ($SE_\pm/SR_\pm$), 'South and South-East Asia' (SE_-/SR_-), 'Africa' (SE_-/SR_-), '"Latino" Countries' ($SE_{\pm/+}/SR_-$), and '"Anglo" Countries' ($SE_+/SR_\pm$). A map which visualizes the eightfold cultural division of the world can be obtained from Inglehart and Welzel (2005, p. 63).

H1 and H2 will be tested by conducting one-way MANOVAs with cultural zones as the independent variable and the Big Five scale scores and the Social Axioms scale scores as dependent variables.

The more comprehensive Hypothesis 3 (H3) is put to an empirical test in a structural equation model that analyzes to what extent the three qualities of the value preferences of the sojourner students' cultures of upbringing impact their personality traits and their images of the human being. Furthermore, the model tests whether the value preferences in the culture of upbringing influence personal values only mediated through traits and social axioms, but not directly. Relevant measurement details are given in the next section.

METHODOLOGY

SAMPLE

The study aimed at exploring the relationship of culture-level values, personality traits, social axioms, and individual mentalities among sojourner students from Bulgaria and other ex-communist countries as compared to students from other parts of the world. It was conducted in 2007 among 193 BA students from essentially all degree programs (natural science, engineering, social sciences, and humanities) that are offered at Jacobs University. Participants were on average slightly above 20 years of age; 52 % of them were males, 48 % females. Students came from more than 40 countries [Albania; Armenia; Azerbaijan; Bulgaria; Canada; China; Colombia; Czech Republic; Dual Citizenship (Germany-Lebanon, Germany-Canada, Germany-Poland, Germany-US, Uzbekistan-Kyrgyzstan); Ethiopia; France; Georgia; Germany; Hungary; India; Kenya; Kosovo; Lithuania; Macedonia; Mexico; Moldova; Nepal; New Zealand; Norway; Pakistan; Poland; Romania; Russia; Rwanda; Serbia, Slovakia; Spain; Tanzania; Trinidad/Tobago; Turkmenistan; Ukraine; USA; Venezuela; and Vietnam].

Students from Romania (n=37), Bulgaria (n=23), and Germany (n=36) made up some 50 % of the sample, with no other country being represented by more than 15 students and most countries (20) being represented by 1 student.

INSTRUMENTS

Participants of the study filled in a 20-item Big Five instrument, the Mini-IPIP (Donnellan, Oswald, Baird, & Lucas, 2006), a 125-item social axioms battery obtained from the authors of the original social axioms scale (Leung & Bond, 2004) in a research endeavor to empirically revise the scales, as well as a 10-item HSI instrument (Rippl, Baier, & Boehnke, 2007).

Data on culture-level values were acquired from the data archive of Shalom Schwartz via personal communication. Every sojourner student in the sample has a score for his/her country of upbringing's position on the seven culture-level value components that, in a second step, were boiled down to the three dimensions of embeddedness$_+$/autonomy$_-$, mastery$_+$/harmony$_-$, and hierarchy$_+$/egalitarianism$_-$. Students with dual citizenships were assigned the average of the respective scores for their two countries of affiliation. For countries for which no scores were available from Schwartz's research, scores were interpolated geographically with reference to the map(s) published by Schwartz (2006).

As for other missing data on the questionnaire items, these were imputed using substitution with the mean for the respective item, as the percentage of missing values nowhere exceeded even 3%.

Consistencies of the Mini-IPIP scales, each constructed of four items, all to be answered using a five-point Likert-scale response format, were as follows: *agreeableness*, sample item "I sympathize with other's feelings," α = .73; *conscientiousness*, "I get chores done right away," α = .70; *extraversion*, "I am the life of the party," α = .73; *neuroticism*, "I have frequent mood swings," α = .68; and *openness*, "I have a vivid imagination," α = .70.

Consistencies of the Social Axioms scales, which also had a five-point Likert-scale response format, were as follows: *social cynicism* (15 items), "People who become rich and successful forget the people who helped them along the way," α = .80; *reward for application* (12 items), "Difficult problems can be overcome by hard work and persistence," α = .83; *social complexity* (9 items), "One's behavior may be contrary to his or her true feelings," α = .79; *religiosity* (21 items), "Belief in a religion helps one understand the meaning of life," α = .93; and *fate control* (5 items), "Fate determines one's successes and failures," α = .68.

As previously stated, the HSI scale is a second-order scale that encompasses first-order scale scores of five two-item scales, all of them offering a five-point Likert-scale response format: *individualism*, "We would all be better off if everyone simply cared for him/herself", α = .30; *materialism*, "Without achievement there is no happiness", α = .67; *social comparison*, "It is always my ambition to be better than the average", α = .66; *Machiavellism*, "It is not important how you win but that you win," α = .41; and *acceptance of social inequality*, "By and large, I find the social differences in my country of upbringing just right," α = .40. Thus, the overall HSI scale, consisting of the five first-order scale scores has a consistency of α = .57.

RESULTS

H1 and H2, which expected significant differences in the prevalence of personality traits and social axiom preferences as per cultural region, were tested by performing two MANOVAs with subsequent univariate tests. The regions proposed by Inglehart and Welzel (2005) figured as the independent variable. Scale scores for the five personality traits and for the five social axioms were the respective dependent variable in each of the two MANOVAs. For personality traits the pertinent $F_{(35/763.8)}$-score, which was tested using Wilk's λ, equaled 2.39, p<.001, η^2 = .084. Table 1 offers results for the subsequent univariate tests and documents rounded means as well as ranks per cultural region. It shows that significant differences were found for three of the Big Five traits, namely extraversion, neuroticism, and openness. H1 is, thus, partially confirmed: Personality traits of sojourner students differ according to the culture of upbringing. Differences are most pronounced for openness, where cultural background explains almost 16% of the variance.

TABLE 1. PERSONALITY TRAITS PER CULTURAL REGION: MEANS AND RANKS

Variable / Region	Agreeable-ness		Conscientious-ness		Extraversion		Neuroticism		Openness	
	M	R	M	R	M	R	M	R	M	R
Protestant Europe	4.10	4	3.14	6	3.46	2	2.91	3	4.23	3
Confucian Countries	3.25	8	4.00	1	3.25	5	1.75	8	4.00	4
Ex-Com-munist Countries	3.89	6	3.15	5	3.44	3	3.13	1	3.95	5
Catholic Europe	3.94	5	3.56	2	3.38	4	2.81	4	3.66	8
South and South-East Asia	3.71	7	3.16	4	2.93	7	3.05	2	3.62	7
Africa	4.25	2	3.35	3	2.92	8	2.69	5	3.88	6
"Latino" Countries	4.25	1	3.00	8	3.13	6	2.31	7	4.25	2
"Anglo" Countries	4.22	3	3.07	7	3.70	1	2.48	6	4.67	1
F	1.96		.50		2.67		2.23		4.94	
p	.063		.836		.012		.034		<.001	
η^2	.069		.018		.092		.078		.157	

For social axioms, multivariate results were almost identical: $F_{(35/763.8)} = 2.47$, $p < .001$, $\eta^2 = .087$. Table 2 offers results for the subsequent univariate tests and also documents means and ranks per cultural region. The table shows that, in addition to the multivariate significance, there are significant differences according to culture of upbringing in the preference of social complexity, religiosity, and fate control. Hence, the belief in the adaptability of human behavior to a specific context and the belief in a supreme being diverge most distinctly among sojourner students from different cultural regions. In light of these results, we can consider H2 as confirmed.

TABLE 2. SOCIAL AXIOMS PER CULTURAL REGION: MEANS AND RANKS

Variable / Region	Social Cynicism		Reward for Application		Social Complexity		Religiosity		Fate control	
	M	R	M	R	M	R	M	R	M	R
Protestant Europe	2.74	5	3.63	8	4.24	2	2.87	8	2.20	7
Confucian Countries	2.67	6	4.25	1	3.56	8	3.05	4	2.20	8
Ex-Communist Countries	2.91	2	3.96	3	4.10	5	3.01	6	2.55	3
Catholic Europe	3.01	1	3.80	7	4.13	4	2.90	7	2.48	4
South and South-East Asia	2.91	3	3.91	5	3.79	7	3.41	2	2.71	1
Africa	2.90	4	4.02	2	3.96	6	3.88	1	2.57	2
"Latino" Countries	2.50	8	3.96	4	4.17	3	3.41	3	2.40	5
"Anglo" Countries	2.52	7	3.88	6	4.45	1	3.03	5	2.25	6
F	1.73		1.57		3.94		4.44		2.22	
p	.104		.148		<.001		<.001		.034	
η^2	.061		.056		.130		.144		.078	

HSI scale scores do not differ significantly between students from the eight cultural regions [$F_{(7/185)}$ = 1.76, p = .098, η^2 = .062]. This can be seen as a first indication that the—direct—impact of culture on personal values is indeed lower than secured for personality traits and social axioms preferences. Relatively highest HSI scores were obtained for Confucian, South and South-East Asian students, and students from ex-communist countries.

The typology of Inglehart and Welzel (2005) according to which we divided our sample in eight cultural regions assumes no (or neglectfully low) differences in value orientations within the cultural regions. With respect to our focus on Bulgarian sojourner students, we performed additional analyses to check whether this is the case in the ex-communist cultural group to which Bulgarian sojourner students were assigned. These analyses showed that Bulgarians did not differ significantly from fellow students from other ex-communist countries on any of the dependent variables included in the above-documented analyses, with the one exception of their somewhat lower preference of the social axiom *religiosity*.

In order to put to a stricter test the preliminary impression that HSI as an individual value orientation is less directly impacted by culture than by personality traits and images of the human being, we conducted further analyses in the framework of structural equation modeling with AMOS17 (Arbuckle, 2008). As described in some detail in the *instruments* section, we gave every study participant three scores that measure the characteristics of the preferred value climate in his/her culture of upbringing, based on data obtained directly from Shalom Schwartz, on whose theoretical conceptions our approach is based. These scores are then specified as predictors both of the five measured personality traits and of the five social axioms preferences. In turn, our structural equation model specifies the personality traits and the social axioms preferences as predictors of hierarchic self-interest. Due to the modest sample size, the structural equation model does not utilize latent constructs. The results of these analyses are documented in Figure 1.
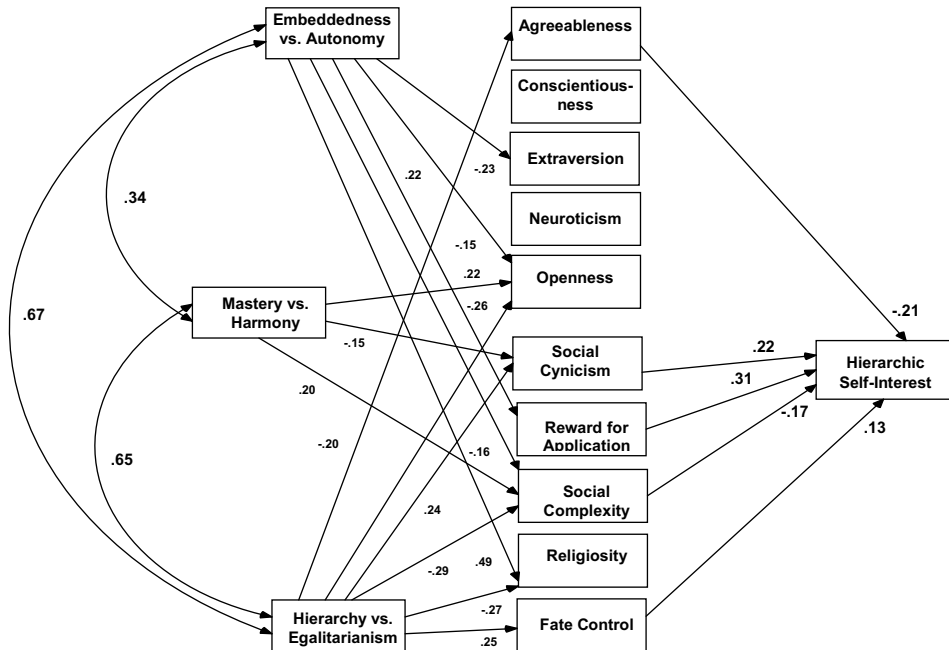
FIGURE 1. STRUCTURAL MODEL OF THE INTERRELATION OF CULTURE CHARACTERISTICS; PERSONALITY TRAITS; SOCIAL AXIOMS PREFERENCES; AND HIERARCHIC SELF-INTEREST

Figure 1 depicts only those paths that are at least marginally significant (p < .10). It omits correlations between error terms simply for considerations of visual clarity. Our model specification allowed error term correlations among per-

sonality and social axioms variables, whenever significant (p < .10). The goodness-of-fit indices obtained for the model were χ^2 = 63.20, df = 52, p = .137, GFI = .955, NFI = .903, CFI = .980, RMSEA = .033, which suggests reasonably high model fit.

An alternative model that also allows direct paths from the three culture-level value indicators to HSI did not lead to an improvement of the model fit; all three possible paths were insignificant (p > .10).

Table 3 documents standardized total effect (*ß*) in the prediction of HSI for all variables that had a non-zero impact on HSI scores. All three cultural dimensions impact individual value preferences (HSI), but the relatively strongest effect is found for the embeddedness-autonomy dimension. Only one of the Big Five personality traits affects individual HSI scores, namely agreeableness, such that sojourner students who tend to be suspicious and antagonistic towards others tend to have high HSI scores. Furthermore, they tend to come from countries that favor strict social hierarchy over egalitarian social relations, the latter being evident from the negative path leading from hierarchy-egalitarianism to agreeableness in Figure 1. Four of the five social axioms preferences are significantly related to individual HSI scores. The strongest effect emerged for reward for application. Sojourner students, who cherish the belief that hard work will eventually be rewarded, tend to also want to put themselves through even at the expense of others (HSI). Such students tend to come from cultures that favor embeddedness over intellectual and affective autonomy. Only the second strongest effect is found for social cynicism. A socially cynical *Menschenbild* is likely to be found among sojourner students from cultures cherishing a harmonious fit of people into the given natural context or a hierarchical social order. Sojourner students who see the human being as flexibly adapting to different life-contexts tend to exhibit low individual HSI scores. These students tend to come from cultures that cherish egalitarianism, autonomy, or mastery. Students who believe that fate determines their lives exhibit higher individual HSI scores than their fellow students who do not. Such students tend to come from cultures that prefer the acceptance of a hierarchical social order.

TABLE 3. STANDARDIZED TOTAL EFFECTS IN THE PREDICTION OF HSI

Predictor	ß	Type of Effect
Embeddedness vs. Autonomy	.17	indirect
Mastery vs. Harmony	-.07	indirect
Hierarchy vs. Egalitarianism	.09	indirect
Agreeableness	-.21	direct
Social Cynicism	.22	direct
Reward for Application	.31	direct
Social Complexity	-.17	direct
Fate Control	-.17	direct

In sum, the results suggest that the sojourner student's *Menschenbild* affects his/her individual value orientations, i.e., the individual hierarchic self-interest, more strongly than one's personality does. Furthermore, culture of upbringing has a stronger impact on the images of the human being (9 out of 15 possible significant paths) than on personality traits (5 out of 15 possible significant paths).

CONCLUSIONS

Sojourner students from different cultural regions of the world differ in their prevalent personality traits, their adherence to particular images of the human being, and—indirectly—in their preference of an elbow mentality in relationships with other people. Bulgarian sojourners as representatives of the post-communist part of the world exhibit below average agreeableness, average conscientiousness, above average extraversion, high scores on neuroticism, and average openness to experience. As for images of the human being, Bulgarian sojourners as representatives of the post-communist part of the world exhibit high scores on social cynicism, above average scores on reward for application, average scores for social complexity, below average religiosity scores and above average beliefs in fate as a determinant of life. As for an elbow mentality, they take Rank 3 (out of 8), being surpassed only by students from Confucian and South and South-East Asian countries.

What is it in the ex-communist cultural region of the world that lets sojourner students be fairly high in exhibiting an *elbow mentality* not easily compatible with West European standards? The answer must stay vague for the time being, as the current study is strictly exploratory in nature. In comparison to students from Western European EU member countries, Bulgarian students come from a culture that puts more emphasis on embeddedness and on hierarchy. This "pushes" Bulgarians into an image of the human being that allows for little social complexity in the assessment of how people behave, which consequentially compels them to put through their interests almost at any expense.

It should be emphasized that the conclusions here apply exclusively to sojourner students, not to tertiary education students as such and even less so to citizens of the included cultures in general. Little is known about who from a specific cohort becomes a sojourner tertiary education student in every country represented in the present study, and who heads for Jacobs University, in particular. Low scores of "Anglos" on HSI in the present study suggest that sojourner students from different parts of the world may not be representative exemplars of their culture of upbringing. Individuals from "Anglo" countries, for example, generally tend to have higher scores than their compatriots in the present study on value orientation like HSI, as becomes clear when one looks at scores of people

from these countries on Schwartz's higher-order self-enhancement orientation (Schwartz & Sagiv, 1995).

All in all, the present exploratory study suggests that it seems worthwhile to further pursue the conceptual idea of the cultural climate of a country being a formative agent in the genesis of individual value preferences not so much through direct impact, but more so by affecting the personality traits of the country's residents and yet more the modal images of the human being amongst them.

For future research, we propose the following directions. First and foremost, cross-cultural psychologists should join forces to collect data on sojourner students from multiple multicultural tertiary education institutions from around the world. Global data of this kind will preclude the use of particular samples confined to a single or just a few university locations. Furthermore, the underrepresentation of a culture of upbringing by just a few individuals or even a single person will be substantially decreased. Global data of the kind suggested here will increase the representativity of the samples; will allow for deeper insights into the impact of culture on personality, the *Menschenbild*, and individual value orientations; and taken to the extreme, global data would eventually allow for generalizability of findings. Second, it is important to control for a possible impact of host culture. It could be the case that host culture's influence as experienced through the interaction of sojourner students with members of the host culture redefines personality, images of the human being and indirectly so, individual value orientations. To ascertain its role, though, research should resort to data stemming from multiple locations as described above. Lastly, students of the mechanism explored in this paper should make use of multilevel modeling techniques in order to adequately account for the nested structure in the data: sojourner students nested within cultures of origin, nested within host cultures. Multilevel models still accurately estimate standard errors with unbalanced subsample sizes; yet, the suggested desirable minimum is above 10 per group at each level, which again urges for the collection of global data (Hox & Maas, 2005).

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A TECHNIQUE FOR PSYCHO-PROPHYLAXIS IN THE KINDERGARTEN BASED ON EMOTIONAL EXPERIENCING OF ART WORKS AND ITS RESPONSE THROUGH A DRAWING

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Abstract: *The present research was aimed at redirecting the pedagogues' attention from the acquisitions achieved in various subject areas, towards the major predicaments – more or less discernible, experienced by every child in the process of their growing-up, which leave their traces in the adult personality. Play and non-controlled drawing have been long established as means for reducing of tension and for the transforming of conflicts with a child. However, an artistically stimulated imagination which projects a certain problem on invented characters, conveys a situation and its solution, safely facilitates and assists the more non-controlled expressing of feelings, emotions and attitudes. This is what stabilizes and preserves the intrinsic children's spontaneity. The outcomes of the present work are: some new conclusions related to the importance of colour preferences for the coding of attitudes towards the objects of representation; a scheme of diagnostics of the dynamics of the positive transformation through a drawing into indicators of expressiveness and of the attitude towards the self-image; the assisting of coping with guilt through facilitated and supported expression of negative feelings by means of sublimation; the studying of current ones and the experimenting of new defence mechanisms and coping strategies for handling of frustrations via drawing.*

Keywords: *Child's drawing; Expressivity; Artistic expression; Spontaneity; Psycho prophylaxis; Preschool age.*

INTRODUCTION: DETRIMENTS OF ACQUISITION

While drawing with young children is a means of social-experience acquisition, it also is a means of conveying impressions, moods, attitude, which impacts the

undeveloped yet speech and reflection through dealing with the sign character of colours and graphemes (V. Mukhina, 1985, D. Marinova, 2000, D. Markova et al.). While drawing, children process their negative experiences as well – fear, violence, anxiety. On the grounds of research, many authors define drawing as a "*graphic language*" characteristic of that age range (E. Aleksieva, 2000), through which a child expresses in a coded manner by means of colours and lines their feelings and emotions. G. Christophe and team /Christophe, G., K. Bilinski, M. Dugas, 1989/ carry out investigations on the dynamics of the "*colour– vocabulary*". In this specific of young children mode of expression, there are to be identified harmony or discomfort, as well as the tokens of adaptation problems and autism, which P. Tsanev (Tsanev, P., 2002) defines as ' *graphic agrammatism*'

While in arts the notion of *expressiveness* means the artistic power of expression, it is also interpreted in children drawings as a freedom of utterance, as well as an experience, as an emotion, conveyed via body language or words (children often talk to themselves while drawing, they invent entire stories on completing a particular drawing which has inspired them), as an attitude towards the featured object – the beautiful and the good are conveyed as fine, while the ugly and the evil are represented in an ugly, negligent manner, with a distortion. Expressiveness adds life into the drawing. It imparts children's thoughts, mood, attitude.

The concept of *Education Through Art* was voiced as early as the Antiquity. Tracing its development historically from Antiquity up to the first decades of XX century in Europe and in Bulgaria, N. Boyadjieva (Boyadjieva,. N, 1994) describes the digressions and extremes, as well as the assets and achievements, characterizing the theory and practice of didactic art. Taking them into consideration, we approach the concept of Education Through Art with the intention of justifying the significance of such an approach in the prevention of the adverse consequences of the economic processes in our country and the reformation of the educational system .

A close scrutiny into pedagogic experience – the private one and the mass practice – on a psychological-pedagogical overhaul, outlines numerous impediments before intrinsic children's spontaneity, as well as premises for its loss along the road to knowledge acquisition.

The pursuit of achievement on the part of teachers or parents as regards the depictive literacy of children, the early acquisition of skills towards creating images veritable in terms of reality, well-structured compositions, weighed-out proportions, mastered colour combinations for conveying moods, put the child under the strain of learning the language of civilization through the mainstream sign systems, to which a child could respond either through endeavouring similarity with certain models, or through resistances. Embarrassment is, however, frequently experienced as a result of the incongruity between the above and the child's own means of expression which conform with the specific stage of devel-

opment and current transitions, bents, interests or there are generated feelings of failure in terms of handling the models and meeting adults' requirements. Other indications of suppressed spontaneity can be observed when the majority of drawings and applications in the group's exposition (the parents' display board) appear to have been drawn by a single young author or when a child repeats continuously over time a stereotype of identical plots, filled-up with identical images, usually static. Along with the hindered spontaneity of expression, the acquisition of social-communication standards also open before the child a great number of opportunities for responding by defence mechanisms some of which prove to be inefficient coping strategies steadying over time. That is so because in the processes of disciplining, which is intended for reducing impulsiveness, as well as for the achievement of some other educational and instructive tasks, learning –acquisition scores achievements but also numerous "sacrifices' which a child's psychic makes.

METHODOLOGY

The objective of this research is to determine the emotional aesthetic experience in the process of apprehending various arts, as an inspiration for artistic activity and for the development of expressiveness in children's drawings within age range 4-6. One of the experimental tasks was the checking-up of the potentials of the experimental model as a means of psycho-prophylaxis during preschool childhood, as well as spontaneity preservation. The research addressed the verification of the following hypotheses: 1. The presumption that children of 5-6 age range make their choice of colours by no means fortuitously, but the choice is unconsciously determined by the physiological bent towards likes and dislikes in terms of colours and by the current colour preferences. 2. Colour preferences underlie the spontaneous use of colours as a means of expression, through which, along with strokes and outlines, children encode their attitude towards the items represented in the drawing. 3.Activities based on combining various arts enhance expression effectiveness, which is reflected in a drawing along with amplification of expressiveness and self-estimation.

The experimental impact with EG comprised instances of pre-selected works of fiction, music, theatre, which boost perceptions towards a richer aesthetic experiencing and emotional response through a drawing, application or plastic items by association or illustration, by means of individual, dancing or group improvisation (frequently set-up by children themselves initiating a choreography of their own), as well as through inventing a new story, tale or rhymes, inspired by art– contemplation.

The comparative method has been employed for the research organization. The processing of the primary empirical information is implemented by quantita-

tive and qualitative methods. The out-comes of both groups' action are registered via the tokens of expressiveness in a drawing in terms of criteria and indexes. The methods of collecting primary empirical information are: observation, experiment, discourse, test, analysis of activity-outcomes, expert assessment and content-analysis. There are forthcoming dispersion analyses, employed in analogical investigations.

The experiment comprised 54 children aged 5-6., from two groups of 27 children each, in two kindergartens in the town of Russe –an experimental group (EG) and a control group (CG), whereof the observations on its effect with the EG went also on in the final kindergarten group – the pre-school one (age range 6-7).

The Semantic Differential Method (after E. Aleksieva, 2000, p. 58) was applied for reporting the emotional– affective component of the significance which certain colours have for different persons . The findings were subsequently compared to the choices made in a colour computer-based test, devised by the researcher for the investigation of actual colour preferences, as well as to the outcomes of a method of investigating child's personality for the purpose of researching self– estimation and self -image " Draw a picture of yourself' by N. Aleksandrova (Minchev, B etc., 2000, p. 231). The method of "Fugure -Colouring' (Aleksieva, 2000, p. 58) helps reveal the significance of colour preferences as a means of expressing specific bents– likes, dislikes, mirth, melancholy. The analysis was also based on children's stories and comments on colouring, and the results were compared also to the colour choices made in the colour computer-base test.

RESULTS

SOME NEW CONCLUSIONS ON THE SIGNIFICANCE OF COLOUR PREFERENCES FOR ENCODING OF ATTITUDES TOWARDS OBJECTS OF REPRESENTATION

In the pilot investigation of the current experiment it has been found-out, that even at the age of 4-5, children make a symbolic use of colours in a drawing while the investigation of colour preferences through an independently devised colour computer-based test, furnished evidence for the presumption that a young child, still lacking sufficient information, untrained and even unencumbered with colour sign systems, is inclined to represent the appealing images in a rewarding way via the currently preferred colours, while penalizing the images of negative bearing on them via the disliked ones. This issue – of the impact of colour preferences on the choice of colours in children's drawings– is frequently brought-up but has so far remained undeveloped due to the difficulties in assessing the individual sym-

bolic entity through drawing-analyzing diagrams intended for group research. In the second part of our research when children are aged 5-6, there have been determined the individual colour preferences via a second version of the colour computer-based test and via a method of semantic differential for reporting of the emotional-affective component of the significance, which particular colours bear on different personalities, also employed by E. Aleksieva, which was adapted by us for applying with pre-school age .

Through investigating the instances of employin the unpreferred colours for the colouring of a figure associated with the characteristics of the negative image in the test 'Figure-Colouring' for reflecting the child's attitude through colour – 'A Boy/Girl Whom I Do Not Love', there was determined a numerical similarity of results with the experimental (EG) and the control group (CG). It shows that over 50 % of the surveyed children (56 % of EG and 57 % of CG) have the inclination of conveying attitude towards a negative image not only by means of 'stroke negation' – more frequently by means of hard pressing, scribbling, but by colours as well, which they have assessed in the colour tests as unpreferred (accordingly, children are inclined to employ the appealing colours when conveying positive feelings, emotions, attitude).

A DIAGRAM FOR DIAGNOSTICS THROUGH A DRAWING OF THE POSITIVE-CHANGE DYNAMICS VIA INDICES OF EXPRESSIVENESS AND OF ATTITUDE TOWARDSWARDS THE SELF-IMAGE

An idea of the change resulting from the experiment with EG by the method of 'Draw a Picture of Yourself' is presented through the **indices** involved in our investigation and **combining tokens of artistic expressiveness**– **reporting the development of the drawing, as well as the psychological tokens of self-estimation –of the child's psychic development**: **Elaboration of form:** 1. Assiduous or distorted; 2. By an even or slight/ hard pressing; 3. With or without decorativeness. **Characteristics of the image:** 4. Well -developed as regards age or primitive; 5.Availability or lack of major parts; 6. Adequately sized figure or a miniature/ over-sized one; 7. Well-balanced or unbalanced; 8. Dynamic or static one; 9. A positive facial emotion or a negative /neutral one; 10. Centered or decentered one.

According to the surveyed indices, there is observed a positive change as regards the size of the figure, balance, motion, positive facial emotion and centeredness, predominantly concerning the horizontal setting –of time zones in the drawing. The vertical lay-out proves a prevailing location in the bottom part of the sheet, also called *the zone of action* in the drawings. The latter reflects child's pursuit, at that age, of self-assertion and growing-up through the identification with skilful significant adults .

COPING WTH GUILT THROUGH THE FACILITATED AND SUPPORTED EXPRESSION OF NEGATIVE FEELINGS VIA ARTS AND DRAWING

To highlight the supplementary function of drawing activities towards the psychic development of a child, we studied the theory of M. Klein on the object relations, which interprets it as being formed as early as suckling age. The baby, for whom the mother is above all an object, satisfying all of its needs – a good breast – begins responding to her cares through developing affection to her personality. 'This primary affection, however, has already been shaken in its foundation by the destructive impulses. Love and hatred contest in baby's mind.' /Klein, M., 2005, p. 135/ Frustrations, fears of loss of the beloved object, the hatred in the violent imagination of hurting its mother, subsequently bring forth guilt, as well as the pursuit of handling the despair of eventually losing her -through reparations: the imagined re– assembling the pieces thus restoring her. According to M. Klein, these primary conflicts profoundly impact the direction and intensity of adult individuals' emotional life. Of importance for the sublimation are the nature of the fragments that the beloved object has been broken into, as well as the nature of the efforts towards their re-assembling. 'What the Self has destroyed is the "perfect" object, consequently, the effort of overcoming the state of disintegration, which has been inflicted onto the beloved object, presupposes the need of restoring the object as a beautiful and "ideal" one. The concept of perfection is irresistible, as it defies the notion of destruction. /.../ Apparently, the pursuit of perfection has its roots in the depressive fear of disintegration, which is crucial for all sublimations.' /Klein, M., 2005, p. 103/ Through the expressiveness of their drawings stimulated by works of art, children obtain the opportunity of repeatedly sublimating negative feelings and of implementing reparations, which get revealed in the freedom of "penalizing' via distortions, negation of stroke and unpreferred colours, as well as in the delight of studiously decorating and restoring the beloved object on processing hatred.

It is als the integration of the father's role, that drawing activities facilitate, and subsequently – the internal liberation from the mother and the ensuing Oedipian triangulation. These natural processes are frequently frustrated by the mother's neurotic lack of inclination of "letting-go' of the child. The significance of the phenomenon of triangulation has been also described by . F. Dolto (2005), but E. Friedrich /8/ features in a comparative diagram (according to the stages of early infant development after Z. Freud, D. Winnicut and M. Muller) the dynamics of the process of detachment from the mother, which takes place via detachments (individualization, separation, differentiation), as via reapproachments (new intimacy), when a consolidation with the surrounding world occurs. Provided the intra-psychic triangulation withstands certain loading, a child manages to achieve 'leaging' (alloying) of the 'good' and 'bad' partial objects into an entire object of

prevailing libido-sustaining valence. Otherwise, there would only be splitting into 'love' and 'hatred', a schism of 'the good' and 'the bad'. The inevitable mother-related disappointments determine the hatred which a child is incapable of showing immediately (the crisis of re-approachment after M. Muller). A 'healthy' child in such cases approaches their father who: 1) meets the child' expectations from a contact; 2) via his relation with the mother sets a model in evidence that relations with her are sustainable despite the disappointment from her; 3) enables a situation where a mother could become the excluded third one, which corresponds to the feeling of vengeance toward the withholding mother. If a mother is capable of sustaining such an exclusion, she is perceived by a child as a mother who handles hatred without getting destroyed by it. The relation with the father helps develop a new attitude towards the mother at a higher hatred-integrating level. Resorting to the father to the disappointment of the mother, proves to be a particularly critical instance. In such a case, corresponding to traumatization, there could ensue fixation on the triangulation. Development might stagnate within the schism between the private world (the Self-world) and the world of the object. Such a development recognizes two protagonists only: ME-and– FATHER or ME-and-MOTHER but not ME-in-RELATION with FATHER AND MOTHER. In case of unsuccessful triangulation, the Oedipian development of any relations with any third party is perceived as a destructive betrayal.

We believe that the EG's drawings on the topic of 'The Best Swing' (based on the eponymous poem by P. Yordanova, voicing a child's delight from walking between mum and dad, who are swinging her/him as the child is holding them with both hands) reflect the individual situation of each child with regard to: a successfully achieved triangulation, the dynamics of these processes or unachieved triangulation– whether in the state of a mother-child dyad, or the consolidated images of a child and father and a detached image of the mother. We have complemented the analysis of the compositional setting of the figures with the reported colour preferences of each child who has drawn to the topic.

TABLE 1. CHILD'S RELATIONS WITHIN FAMILY TRIANGULATION AS CONVEYED IN THE DRAWING VIA COLOUR PREFERENCES

Children surveyed	Employed current colour preferences		Partial matching of preferred and unpreferred colours – negative attitude towards oneself or a parent(s))
	Positive attitudes, preferred colours	Undisolved conflicts, unpreferred colours	
21 (Out of them boys 8)	6 (Out of them boys 1)	8 (Out of them boys 2)	7 (Out of them boys 4)

Out of 21 children (Out of them boys 8) in total 14 (Out of them boys 3) have explicitly used their current colour preferences– positively assessing the relations in a successfully achieved triangulation (a harmonious image of the triad mother, father holding the child by the hands between themselves) – 6 (out of them 1 boy), and assessing by the unpreferred colours employed in the drawing , the unresolved conflicts with 8 children (out of them 2 boys). The employment of colours with the remaining 7 children (Out of them 4 boys) shows a stage of partial integration of bits of the mother and father's image combining, matching preferred and unpreferred colours to a negative attitude towards oneself or to any of the parents, or to both of them, which reflects the inner conflicts in determining the child's relations within the family triangulation.

STUDYING CURRENT ONES AND TESTING NEW DEFENCE MECHANISMS AND COPING STRATEGIES FOR HANDLING FRUSTRATING SITUATIONS THROUGH DRAWING

We also report the positive effect of the experimental impact with EG through studying the defence mechanisms and strategies of coping with negative experiences via figurative methods as compared to CG.

Studying the ways of coping with frustrating situations has been implemented via drawing to a negative test topic 'The Fearful Dream' (after the eponymous poem by A. Germanov). It proves prevalence of current strategies with EG– in 15 drawings (out of them 5 by boys) out of total 18 drawings (out of them 6 by boys). Some are observed in an explicit *fight* with the 'aggressor' (the bear or another imaginary image), a *flight* or a display of *cooperation* through figurative conformity, achieved via decorating of the negative image, having undergone either intellectualization or suppression as defence mechanisms. With the control group CG we have outlined instances of explicit coping with the negative experience in 3 (out of them 2 by boys) out of the drawings of total 19 (out of them от тях 12 by boys).

DISCUSSION

Drawing under the employed method goes on by means of words and spontaneity is transferred into the attempted verbal expression of own thoughts, opinions and attitude towards s the depicted item. Thus the intensity of communication renders a psychotherapeutic and psycho-correctional effect. That imposes a requirement for a well-developed sense and experience of a pedagogue or psychologist using the method of working with arts, related to identifying the states of a problem: inner conflict, psycho-trauma, inefficient defence mechanisms, so as to proceed working through the discourse on the drawing, as well as via the drawing activity

itself towards the working-out of the current problem, or to re-direct the work with a child over to another expert. Professional responsibility calls for expanding their communicative skills and professional experience in socio-psychological trainings, as well as in supervising the diagnostic and therapeutic characteristics of a drawing.

The significant role of a supervisor and their intervention is analyzed and emphasized by N. Boyadjieva:

'A supervisor studies the feelings of the supervisee (including feelings and experiences related to a particular intervention), affording them the opportunity of handling their own affects and/or defences. A supervisor facilitates the supervisee's self-knowledge, helps them disclose their personal problems and assists their development.' (Boyadjieva, N, p. 723).

- The results of the current investigation have proven that:

- The individual colour preferences play a key role in conveying attitudes to a depicted item via colours;

- The harmonious compositional structuring of a drawing is of direct dependence on the extent of inner harmony acquisition, on the self-estimation and on the attitude towards oneself at the time of drawing;

Stimulated through works of art, drawing preserves spontaneity of expression, and along with it, a child's individual style of drawing; brings forth a more vigorous experiencing and amplifies processes via making-over inner conflicts even within a single drawing, unlike non-controlled drawing, whereof a child often tritely works-out through inefficient defence mechanisms an on-going problem in their individual situation or development.

CONCLUSIONS

Besides for working in a children group, stimulation via negative topics – based on a work of art – could be also applied in consulting and psycho-therapeutic practice for the purpose of coping with guilt. Thus, there could be achieved a "rehabilitation' of a mother by means of drawing -experienced reliable safety, which a child resorts to for fear of frightful factors.

Elaboration of systems for diverse interrelated art-activities would facilitate teachers' work, while the outcomes of such an impact on a child are undeniable, too. We therefore express our hope that such an approach to working with children of preschool age will allow for experiencing of grater satisfaction in their future life of mature personalities.

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THE INFLUENCE OF CURRICULA AND THE SOCIAL ENVIRONMENT IN GENDER EDUCATION OF THE 6-12 YEARS OLD CHILDREN

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Abstract. *This research deals with the opportunities that the school programme offers in educating the roles, gender stereotypes and androgenic gender models and how these are dealt by the pedagogic staff. Identifying the way how the gender roles are introduced, how the issues related to affiliation and gender identity in elementary school curricula are evaluated and how are they conveyed to the pupils. The studying has as an initial point the content of the programme and of the alternative school textbooks in the subjects: ABC Book, Albanian Language for the second, third, fourth grade and the textbooks of Civic Education from the first to the fourth grade. As for the programme we may say that they do not offer such an immediate opportunity due to the lack of particular subjects or issues that can deal with the knowledge of gender roles according to age development. Text analysis is done based on statistical dates and qualitative descriptions through elaborative techniques and through the objective interpreting of findings. The studying tends to reach some conclusions based on the findings and through this is able to make some suggestions related to accomplishing gender education (gender perspective) in the textbooks.*

INTRODUCTION

The research addresses an important practical and theoritical issue emerging in the field of education, the upbringing of the schoolchildren with gender affiliation, identity and roles, alongside the identification and evaluation of the actual situation regarding gender education in the elementary school system. This is because the problem itself, with its complexity, affects various aspects of education in terms of its practical and theoritical application. On the other hand, gender

education conveys and creates values which provide visible effects in the cultural and social aspects.

School children education regarding gender issues is not a recent-emerged problem. Human society has a rich historical background showing how this education has been and is being nurtured. To this regard, we can say that up to now the gender education has been provided by means of the socializing factors and by imitating the family and social models offered by the society, culture and media. Still, their outcomes leave much to be desired since their effects consist solely in sterotyping the roles and gender affiliations. The effectiveness of this research will be impacted by the society but the latter one needs to be provided a "new model", diffrent from the one offered so far, considered with more affection and righteous attitudes. Creation of these models firstly inquires more awareness about the terms regarding this kind of education as well as about the factors which impact the behavioral attitudes of the people. The terms sex and gender are frequently interchanged but they are diffrent. Sex is a biological term referring to the sexual organs which determine the sex of the individuals as males or females, right from their birth. Gender is a psychological term referring to the subjective feelings of the males and females (gender identity). It refers to the validation of the people's behaviours by the society as masculine or feminine ones, (gender roles). Behavioral changes are affected by social factors, socializing practices, social awards, changes in status as well as observers' expectations. In general, the stereotypes itself result to be strong for the people of a certain social category. They are not genuine because they appear simplified and even can be subject to modifications. While referring to the stereotypes of gender roles or to those of the sex roles we actually regard to them as "structured groups" with specific persuasions about the individual qualities of men and women. These persuasions are normative in terms of their features related to gender, they exist and are even desirable. For most people *masculinity* has been related to as competence (good incomes), intellect and the energy whereas *femininity* is connected with the warmth, the way of expressing feelings and education. Stereotypes are not predetermined by cultural differentiations but they are adaptable to them[1]. They determine the expected gender behaviour and the individuals' self-introduction. We tend to present ourselves in the ways we consider as being acceptable by the others. Use of impressions shows the effects of the gender stereotypes in us. Shaping all these factors in the teaching process should be done carefully since children present diffrent scales of adaptation towards them. To identify the actual situation of the aforementioned issues, a random selection of parents, teachers and pupils was made and they were surveyd by means of questionnaires and interviews, both in terms of the social aspect and in the field

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[1]   Stereotypes and Gender Roles. (Susan A.Basow:13,14)

of the curricula. The latter one is changing frequently, regarding subject pro-grammes, due to the structuring processes to our education system as a whole. Still, despite the obvious efforts to improve curricula and the school textbooks, which are alternative, and besides the fact that the impacts to the gender educa-tion of the students have comprised one of the criteria for the evaluation of the structuring processes, the actual situation leaves much to be desired. I think that it is not difficult to realize gender education which should be realized by providing a special subject to support it, but considering it in more affectionate terms and careful interpretation as well as by using the inversion method, I think the trained teachers can realize gender education successfully. Also, the students and teachers studying in the fields of the pedagogical studies should be provided the respective knowledge and prudently convey any social concerns emerging with this issue. The methods used to realize the reasearch served to identify the real situation in regard to this problem. Basing on the research findings about the identified situation and the probable opportunities offered, the following sug-gestions are provided to help resolve the unpleasant situation we are at present.

RESEARCH OUTCOMES

Social Roles

Questionanires, interviews and focus groups and conversations with students, teachers and parents of three schools in Elbasan Town have served as base tools for collecting the research information and findings. The questions focused on the ways how to apply gender education for children, considering it from a more broad point of view and not separating it from the influences by the community and social factors.

The gender distinctions that children reflect in everyday life are the models and behaviours provided by their parents or those that the community and the so-ciety generally impose on them. It is clearly obvious that children identify them-selves as being female or male solely in relevance to the objects or behaviours de-termined by others. Children are prone to or more interested in the toys that have been labelled as suitable for their gender rather than those which are not suitable in that regard . The gender labelling of the toys by parents, community and sales-men is very efficacious. As it is known, the preferences for suitable toys relevent to the gender of children take shape right from their birth, especially after the 18 months of age. An 8 – 10 year old child has been dictated the toys to play with as well as the colours of the clothes to wear. Later on, these turn into their individual preferences with which they identify their social roles.

Gender roles have been acquired right from early childhood and their ef-fects are unconsciously reflected in the individual's behaviour so influencing all

his/her life cycle. The influence of the curricula in the respective situations plays an important role for the application of the gender education by means of illustrative ways (which for this age group play an important role in conveying the messages), and the teachers' role in transmitting knowledge and resolving problem situations.

CHART No 1
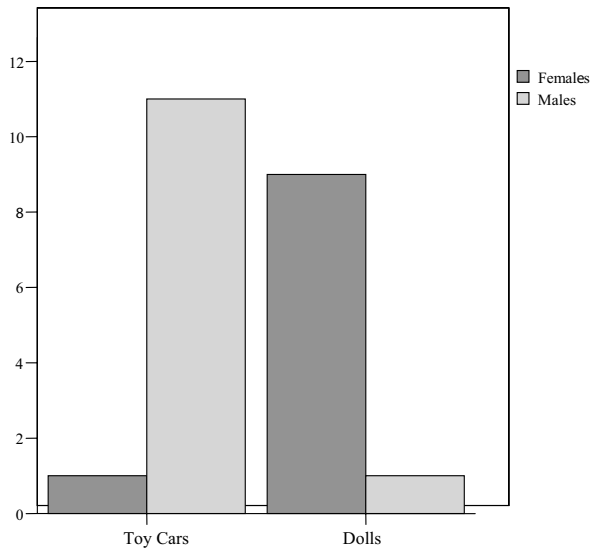
It is clearly obvious from the questionnaires and interviews realized with children of the elementary school cycle that females have chosen the dolls and males have chosen the toy cars as their favourite toys. This selection coincides to what they have been offered right from their early childhood. Their individual identification with their most favourite toys displays their gender stereotype in selecting toys while the latter have been considered as some of the factors that help children's development. While playing with toys children display their expectations for the future.

The question: "How would Albi feel if parents bought him a Barbi doll as a birthday present?" took relatively the same response for most of the children: "Albi wouldn't feel well because the favourite toys for boys are not dolls but cars". Some even more conspicuous responses to this question were: "Albi would feel bad because the Barbi doll is a toy for girls", or, "He would feel bad because boys can not be entertained with dolls and girls do not like toy cars". Their responses demonstrate clearly that their roles in life have been dictated by others as well as their toys.

CHART No 2

Can a boy play with a Barbi Doll?
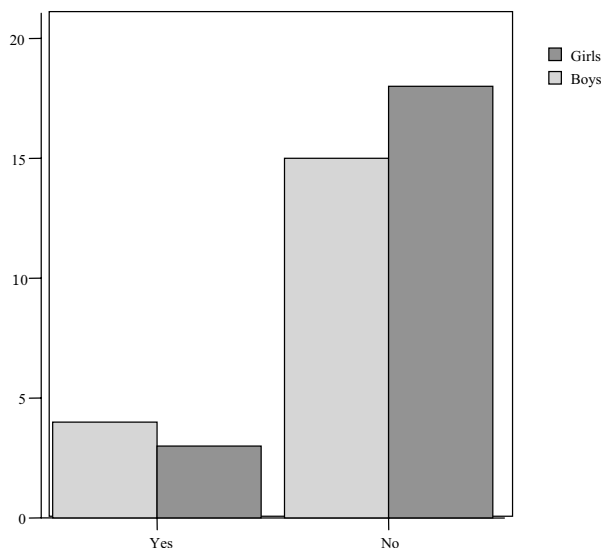
Children develolp their suitable gender preferences too early in their life, sometimes since they are 18 months old [1]. Their choice has been early affected by the adults, the effect becomes even more efficacious and can hardly be realized as such until it becomes a stereotype. In general, the selection of the gender suitable toys by pre-school system children is associated with other forms of social behaviour relevant to their gender [2].

Parents as well as other individuals in charge of the children's education suchlike the teachers, educators, grandparents, the school, community and media are determinant factors in creating their gender identity. When the girls read the question: 'Have you ever played football?" they began to laugh because girls never play football. Only two of them said they had played football with their respective brothers while they were on holiday, on the beach, but they had played the game in a diffrent way, (not divided in two teams), as it is actually played by boys. Girls had only played it as "Who can score more goals?" and they went on to tell happily that there were cases when they had scored more goals and had won the game. The culture of the society is also determinant in creating individuals identity.

School Institutions as determinants in creating the children's gender identity.

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[1]   Stereotypes and Gender Roles.
[2]   Stereotypes and Social Roles

The gender role is a social construct formed under the effects of the social, educational and cultural contexts. Its configuration is function of an educative methodology with a longer extention in time. The following is the enunciation of the gender concepts in school environments: textbooks, teaching methodology and teachers' communication nurtures the children preceptions and attitudes as well as their understanding about proper behaviours.

Interesting data were collected regarding gender preferences and the students's gender distribution within the classroom, by the questionnaires filled in by the female teachers (since the majority of the teachers were females).

CHART No 3

I prefer to have more Male / Female students in my classroom.
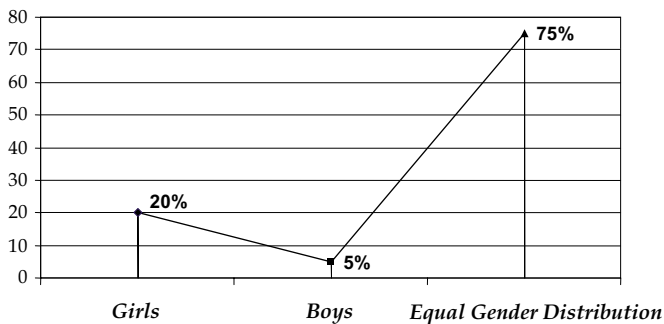
As presented in the chart above 75% of teachers prefer to have equal gender distribution of students, 20.0% prefer having more females than males and 5% do not provide any responses.

The figure shows the teachers' inclination to make gender differentiations as well as their preferences. Their choices can be explicated with the easiness resulting while working with girls since they are steadier and more compliant than boys.

CHART No 4

How is students' placement on their desks arranged?
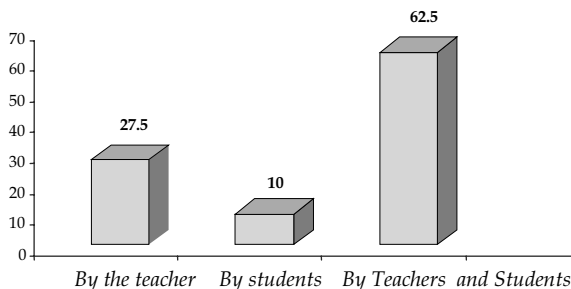
Data obtained by the questionnaires show that 62.5% of the teachers arrange the placement of students in their respective desks in cooperation with the students, 27.5 % of teachers say they decide themselves for the placement of the students in their desks whereas 10 % of teachers allow students to decide themselves where and with whom to sit on their desks. Therefore, teachers are those who dictate the placement of the students in their desks.

Playing has a great influence and plays a great role in forming children's thinking schemes as well as their perceptions for themselves and others; it is linked with their expectations dictated by their roles in the future and the physical development of this group-age. But, the effects of the socializing manners as well as the adults' influence to gender distinctions are noticed even in playing.

CHART No 5. *When students are free to play*
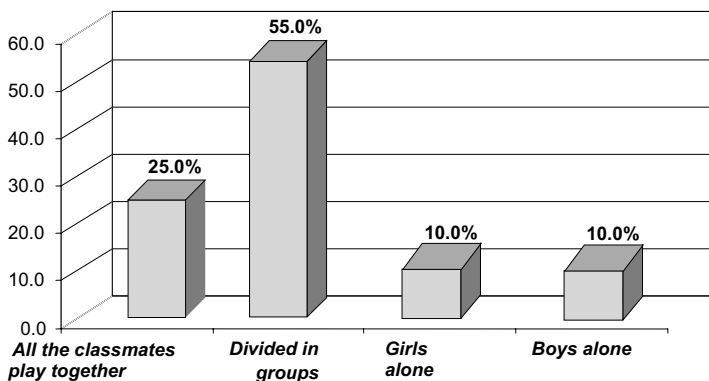
Some of the teachers act as gender differentiators for their children in extra-curricular activities or in organizing their sport activities, 55 % of them confirm that students are divided into groups because their preferences for their respective games differ, (boys prefer playing football, whereas girls play rope games, or fighting with balls), this percentage should include 20% more since the boys and girls themselves affirmed they prefer to play separately, in different groups.

Children of the 6-11 years of age live the phase of concrete operations: their thinking process is based on the observed objects and real life experiences. Abstraction is impossible. Shifting attention from one quality to another, which, according to Piagett is typical to this age, helps to extend the bounds of their thinking The process of attention restitution is continous to children, by re-estimating and calsssifying features once and again. Attention helps them to restitute the learning schemes.

Children are social beings in continous interaction with their parents, friends and teachers. They learn in continous and complex ways. Through collaboration they set up schemes of interpretation for their personal experiences, adaptation

schemes and shape the insight of giving a meaning to events and circumstances. Social constructions, by which they preserve interaction are embroidered by the cultural and the upbringing context they are grown in.

Study distribution according to gender

CHART No 6

5%

95%
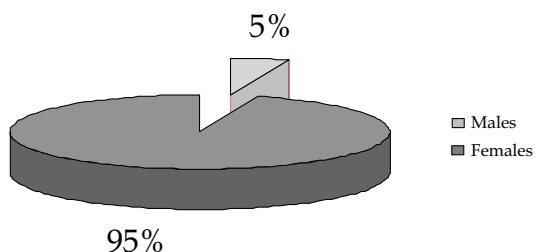
Males
Females

From the interviews obtained in the lower cycle schools it resulted that 95% of the pedagogical staff are females and solely the rest of 5% are male teachers. The teacher's profession has been stereotyped in the Albanian society as a profession for females for various reasons. Here is what a teacher of the elementary school cycle puts it in words: "Children feel more comfortable with females and they communicate better with them, by analogy with the role of mother at home, they express themselves freely and feel more relaxed" A part of the interviewees, especially the male teachers consider the profession as deficient in terms of the economic aspect because of low salaries and the insufficiency to support their families financially.

CHART No 7

Preferences for the managers of the school Institutions

21%

5%

74%

Men   Women   Doesn't matter
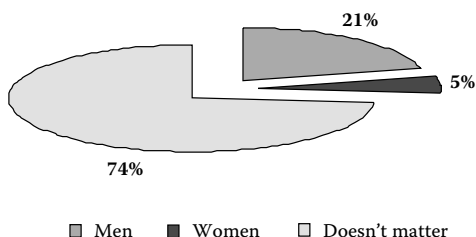
Leadership roles are generally attributed to males. This is obvious from the responses of the female teachers when 21% of them say they would like their school manager to be a male, 5.0% of them think for females whereas for 74.0%

it doesn't matter, ("we will work the same" – confirms one of the female teacher interviewees.

Note: There have been no men included in the interviewing process since male teachers make up a small percentage of the pedagogical staff and couldn't be selected by random sampling.

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Family influences in perceiving and determining social roles.

Women have been cinsidered as the ones that should invest their working capital to the children's rearing and upbringing, so they do not invest for their own preparation and qualification for a successful career and do not choose work places that need continous training, long term employment or progressive increase in their potential salaries, relevant to the human capital theories.

CHART No 8. Child Rearing and Upbringing in the Famil

35%   59%   6%

Mother
Grandmother
Both parents
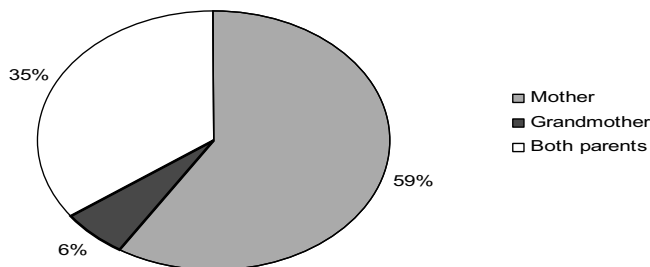
While referring the outcomes from the interviews with parents of the students it resulted that 59.0% of mothers confirmed that they look after all their children needs, including their education. This percentage for child rearing increases if we add the 6% of the grandmothers who also care for children's needs.

The patriarchal ambient still prevails in a considerable part of the Albanian families and this model is obviously reflected in their children who can easily show what the role of the father is in the family and who is the decision maker at home. One of the elementary school pupils affirms: "My father commands at my home". It is true that the concept of devaluating the women's work is a substantial feature of the patriarchy, by so explaining why the women's employment status and payment decline for the work categories they have been employed to.

CHART No 9

Income administration in the family

Data from the information obtained regarding the administration of the incomes in the family once more confirm the influence and role of the male as a leader of the family, so the majority of the families display patriarchal features.

We could observe that most of the parents, especially fathers, believe that between males and females exist essential differences and parents treat their children in diffrent ways, by modelling diffrent prental behaviours. "*Don't behave like a girl*"; "*Boys do not whimper, they should be strong*". "*Be a real man and don't be afraid of difficulties*", these are typical wonts transmitted by parents to their children during all their rearing and upbringing process.

Results from data obtained and processed show that 20,6% of parents practice these wonts, 44.1% affirm they use them sometimes and 35,3% said they don't use them. Quite unconsciously and "unintentively" and during the longest period of child upbringing, parents project roles for them.

Parents' attitudes can be linked with the development of their children's gender roles. Fathers who display traditional attitudes towards their wives (traditional role at home), are inclined to have children that are distinctly appart in terms of gender in the early years of their ages.

CHART No 10

Use of parental behaviours and attitudes
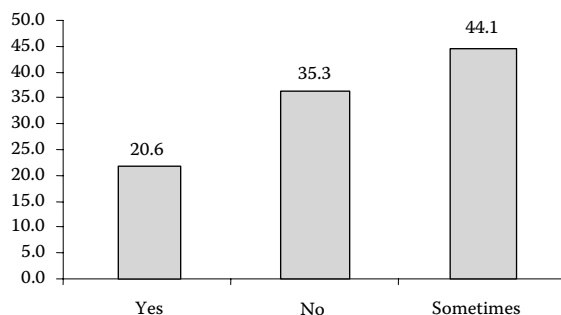
The parental specific behaviours resiult to be related with the chikldren's gender development. Both parents, mother and father are determinants to this regard.

Children's gender attitudes and behaviours as determinants in creating social roles.

From the responses obtained by school pupils, regarding their preferences for the class keeper (pupils in charge of keeping rules within the classroom), 82% of the girls selected girls as class keepers. During the composition of the questionnaire we left a space for any comments students might have in selecting this alternative. The following are some of the comments provided by them: "Because girls are more cereful", "because I am a girl and can communicate better with girls", "Because girls are more polite", " I like girls because they are more straightforward ", "Girls are silent, boys are noisy".

CHART No. 11

Girls' preferences for their class keeper
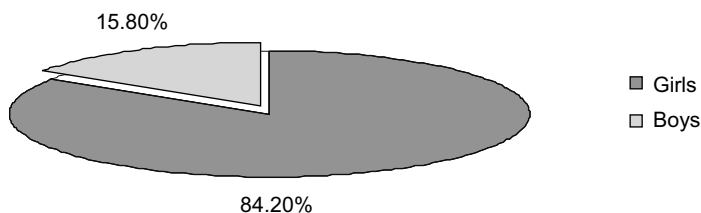
From the questionanires obtained by the lower cycle school pupils, regarding their preferences for the gender of their class keeper we noticed the tendency that both genders selected boys as their choice for this role. This can be explicated with the model of the father as leader in the family, (the choice is more frequent by girls).

CHART No. 12

Boys' preferences for their class keeper

35.00%

■ Girls
□ Boys

65.00%
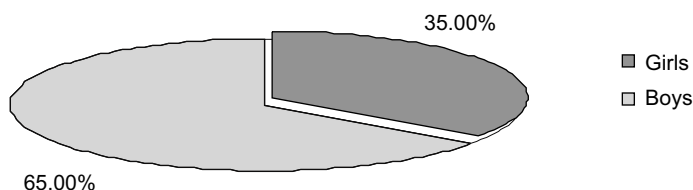
Boys selected boys as their class keepers while providing their conspicious comments as the following :"A boy, bacause he can keep order", "A boy because girls are spoilt", "Boys are stronger than girls", "I am a boy and I want a boy to be elected", "I want a boy to be elected because they are more strict ", "The boys are stronger and more careful and apply the rules set by our teacher in the classroom" "Because boys do not make differentiations treating the others".

Monitoring school textbooks

a. *Typification of the mental modelling and behaviour expectations*
From the detailed monitoring of the school texts, their contexts and the phrases they use we could notice the authors's disposition to illustrate the didactic materials by providing real-life examples. Still, in general they convey disctinctive stereotypes between two genders.

The dufferentiation of children according to their sex-roles is obvious in diffrent letrary extracts and their respective illustrations. The monitoring process also revealed that textbooks authors consider the age development and the influence the visual aspect has for children in obtaining information properly, (phase of concrete operations). For the first grade illustrations are more necessary since children start to read solely at the end of the school year so long-term memorization of their teachers' words and information becomes difficult.

TABLE 17. PERCENTAGES OF THE TEXTBOOKS ILLUSTRATIONS FOR EACH SUBJECT

Subjects	Boys' pictures in / %	Girls' pictures in / %	Total
ABC	7.8	3.5	11.3
Civic Education 1	5.3	4.4	9.7
Albanian Language 2	13.7	12.9	26.6
Civic Education 2	8.5	3.7	12.2
Albanian Language 3	9.8	6	15.8
Civic Education 3	5.7	1.5	7.2
Albanian Language 4	4.7	4.1	8.8
Civic Education 4	4.9	3.5	8.4
totali	60.4	39.6	100 %

CONCLUSSIONS AND RECOMMENDATIONS

The Analyses of the National Standards for the Mandatory Education show that objectives for providing gender education and social objectives lack totally so that they should be considered by the standard keepers and the textbooks authors in regard to this kind of education.

Text extracts provide stereotypes to the typical schemes in real problem situations where gender roles take shape.

Illustrations, which serve to reinforce the conveyed information, stereotype gender roles through schemes where the gender identity and social contexts take shape.

Education is often realized through providing models and imitations by others, therefore, by the social influence.

Findings and preferences the teachers had about the gender diversity and the placement of boys and girls in the classroom ambient, or about the ways girls and boys are divided during activities of any kind, influences the students gender education.

While the problem should be considered from a broader viewpoint by teachers, more attention should be paid to gender education

Gender education to be settled as a sorting subject at the faculties which prepare teachers:

- ⚮ Providing continous training for the academic staff
- ⚮ Drafting a package with a set of topics on gender education.
- ⚮ Integration of the gender education to the curricula and other school activities .

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THE GENDER GAP – ADOLESCENT'S ATTITUDE TOWARDS SCIENCE AND TEACHER METHODOLOGY

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Abstract. *In the past two decades, research has strongly suggested that males have a supremacy over females in the hard sciences. The controversy has spawned a surge regarding gender differences in science performance and school education. Recent studies have asserted that there are no gender differences. However, the question remains why hard sciences even today, despite the effort to increase their popularity among females, remain mainly male populated careers. Despite its importance and abundance, such research has predominantly focused on the USA and Western countries. The researchers feel the need to expand the effort to a less studied sample, such as Bulgarian teenagers. At local Sofia schools, a questionnaire probed 169 teenagers, from 14 to 18 years of age, for their opinions about their attitude towards science and their view of the teacher methods. The research found that female participants scored higher on the Student Attitude scale; thus they held a more positive attitude about science than their male classmates. Female teens were more likely to devote more time in science, complete their homework, have a higher interest in science classes and pursue a science related field of study. On the Science Teacher Methodology scale, female students also indicated more positive views than their male peers. This means that female students experience more interactive teaching styles and their curriculum includes visual aid models and teacher-rewarded student effort.*

Keywords: gender, adolescents, attitudes, science, pedagogy, methods.

INTRODUCTION

It is an indisputable fact that in 21 c. gender differences are still clearly expressed in various spheres of public life and women are more poorly represented in comparison with men in occupations and in academia related to natural sciences. In the last 20 years, researchers have directed their attention to study of possible reasons for this. By their conclusions, the great number of studies performed remain contradictory and difficult to systematise. Gender differences in students' attitudes towards natural sciences started to be observed already in school (Enman & Lupart, 2000). As a whole, empirical surveys along these lines are few and conducted mainly in countries of Western Europe and America. It is the analysis of gender differences in attitudes towards natural sciences of students from Bulgaria and of teacher methods applied for their teaching in school that this paper is dedicated to.

In contemporary scholarly literature, the understanding is found that cognitive abilities of girls differ from those of boys and are, respectively, more unfit for studying natural sciences (*biology, chemistry, physics and mathematics*). In a meta-analysis of 18 articles, that covers a total of 6,753 students, Weinburgh (1995) has established that, as a whole, boys have more positive attitudes towards them in comparison with girls. Of interest are the attitudes of both genders towards *specific natural disciplines*. For example, the gender differences are more poorly expressed in biology and considerably more clearly expressed in physics and chemistry (Schibeci, 1984). The authoress explains this with the fact that physics is a subject that during its age-old history has shown that women are more poorly interested in it in comparison with men. Another study (Dawson, 2000) conducted in Australia confirmed the same results – boys are more interested in physics, and girls – more in human biology. Bell (2001) studied the attitudes towards natural sciences of 16-year-old students from Great Britain and also established gender differences. He ascribed them to different activities in class, in which girls and boys participate, and to social factors such as the group of peers and parents.

According to data of the National Center for Education Statistics (NCES) in the USA, gender differences are observed in the self-assessment and marks with respect to natural sciences among students of both genders. They are present and are observed already since early childhood and grow with age (NCES, 2000). According to empirical data, until the age of 11 years, girls have in comparison with boys more poorly expressed positive attitudes towards those subjects and participate less in the tasks assigned to them in class (Adamson, Foster, Roark & Reed, 1998). According to a national statistical survey, 62% of girls and 67% of boys from 4th form like natural sciences. Out of them, 40% of girls and 50% of boys think that they are good at natural sciences. When, however, the same questions are asked to students from 12th form, 42% of girls and 52% of boys like natural sciences. However, only 34% of girls and 44% of boys feel confident in their knowledge of natural

sciences. A similar trend and gender differences in results obtained are observed in a survey conducted by the American Association of University Women (AAUW) in 1992. According to them, 75% of boys and 63% of girls in the secondary school like natural sciences.

The researchers Sadker and Sadker (1994) spent hours on end in observation of work of students from elementary and secondary school in natural disciplines. They have established that teachers spend more time, efforts and energy in their work with boys in comparison with girls. According to them, the class room consists of two worlds: the one includes the active boys, the other – the reticent and passive girls. The results show that the boys participate more in discussions in classes, asking and answering to more questions in comparison with girls, the teachers address them more frequently even when girls raise a hand to participate, the boys receive more, and more frequently, rewards for their ideas and, as a whole, boys get more significant and clearly expressed feedback about their work from teachers in comparison with girls. The teachers communicate with girls less and more rarely, answer to them with short words such as "yes" and "good" or a nod and rely on their ability to follow instructions. The observations by Sadker and Sadker (1994) of the relations in classes in natural sciences confirm the results from the survey by Tobin and Gallagher (1987).

Surveys of students between 8th and 12th form in Australia show that boys raise a hand at will to answer to questions asked by teachers of natural sciences 10 times more often than girls and are allowed to speak approximately 3 times more often (Tobin & Gallagher, 1987). Naturally, boys have higher marks in those subjects and develop better logical skills in comparison with girls who participate in classes more poorly. The opposite results of Labudde et al. (2000), according to which the relationship between students' attitudes towards natural sciences and their participation in classes in those disciplines is statistically insignificant, should be also noted.

Other investigations examine the *teacher methods* used by teachers in these classes. Brotman & Moore (2000) emphasise that the educational contents and methods applied in teaching natural sciences often ignore gender differences in class and do not motivate students. The authors emphasise the necessity of change in educational material, with it being to a higher extent in conformity with gender differences of children in school in order to motivate the girls more successfully and to improve communication between teachers and students. The necessity of investigating the relationship between gender identity of girls and their choice for further career development in the sphere of natural sciences is shown.

According to some authors (Hyde & Jaffee, 1998), gender stereotypes of teachers of natural sciences lead to differences in cognitive strategies, in teaching styles and in attitudes towards girls and boys in the class room. By citing results from a conducted survey of gender differences of students when solving math-

ematical problems, the authors conclude that the teachers encourage the boys to look for more creative solutions, and the girls – to acquiesce and be more conforming. This finds expression in the fact that boys use more often abstract solutions of the problems assigned, and the girls choose more specific methods, such as counting, and resort to a standard algorithm.

According to Sadker and Sadker (1994), most teachers do not realise the hidden scepticism they manifest in their work in those disciplines. With time, however, the cumulative effect of the unequal gender relations in class turns into a peculiar message to the girls that they should be silent, not express clearly and openly their opinion if different from that of boys', stop to be assertive and start to suppress their creativity and creative abilities. All this find later its logical expression in lower marks and poorer academic achievements in natural sciences.

A similar idea, however, has been rejected by researchers such as Hyde & Linn (1988). They show that gender differences are not statistically significant when performing verbal tasks set in those subjects. Results obtained from the survey by Hyde et al. (2008) also do not find gender differences in studying mathematics by students between 2nd and 11th form.

That is why, a great number of researchers (Singh et al., 2002; Weinburgh, 1995) direct their attention to studying the possible *reasons* for this. Baker & Leary (1995), for example, analyse the reasons for which girls choose to study natural sciences in school. According to their results, girls who actively participate in classes and wish to make their professional choice in this scientific field have a positive attitude and believe that women can successfully find realisation. The study by Brickhouse, Lowery & Schultz (2000) of individual cases shows that there are internal psychological factors, such as *motivation*, and presence of *positive attitudes* towards natural disciplines. More specifically, the girls experience a sense of belonging and closeness to the educational material with respect to those subjects and the school as a whole. They wish to study natural sciences at school. With them, positive attitudes and confidence in their future development in the bosom of natural sciences are also observed. Along the same research line, Adamson et al. (1998) examine the role of different factors of upbringing. According to them, *teachers and parents* are empowered to motivate and support girls in studying mathematics and other natural sciences at school. This conclusion has been drawn on the basis of data that girls in elementary and secondary school have lower levels of confidence in their mathematical abilities in comparison with their male classmates. The difference shown is observed during the whole age period that covers the stay at school from the elementary forms to the graduation and even during the first year of the higher education. As other factors that exert influence along these lines, the *intellectual abilities* of students, their *marks in natural sciences* and the *socioeconomic status* of the families they descend from are shown in scholarly literature (Singh, Granville & Dika, 2002).

As a possible reason in looking for explanation as to why the girls are more seldom oriented in their career development to disciplines in the bosom of natural sciences, some researchers (Noddings, 1998) show the differently passing process of *socialisation* between both genders. The interest of girls in natural sciences as a choice of a future occupation is prompted by the wish to render assistance and the thought of usefulness in society (Baker & Leary, 1995). The survey conducted by Sheperd (1993) shows that women who have chosen to develop professionally in natural sciences pay more attention to relations with subjects of research and with colleagues form their research team. Indisputably, the "woman's" point of view in science may provoke a conflict with the "man's" one that emphasises the hierarchy, distance and objectivity. This could be one of the possible reasons for women's dropping out of academia in the bosom of natural sciences.

In the countries of Eastern Europe, such as *Bulgaria*, there is a long tradition in teaching natural sciences. In them, women are represented equally with men. More specifically, after 1950 their representatives participate in a number of world olympiads and win a number of medals and distinctions. Andreescu et al. (2008) made analysis of winners in the international competition The Putnam Mathematical Competition that takes place annually since 1938 on. According to data until 2008, some countries of Eastern Europe, such as Bulgaria and Romania, and countries from East Asia, such as China, continue to take care of with exceptional mathematical abilities. In the said competition, there are less female representatives from countries such as USA and Canada. The majority of them are children of emigrants from countries that are overrepresented in the competition.

The **aim** of this survey is to establish if there are **gender differences** 1) in the *attitudes of students from Bulgaria towards natural sciences* as a whole and 2) in the *teacher methods used* by teachers in those classes.

METHODOLOGY

SAMPLE/PARTICIPANTS

Participants included 169 middle and secondary school Bulgarian boys and girls with an average age of 15.81 years. The total number of girls was 108 with a mean age of 15.74 years and there were 61 boys with a mean age of 15.93 years. The students all came from random middle and secondary schools located in various districts in Sofia, Bulgaria.

The students' range of age started from 14 years to 18 years of age. There were 24 students who all were 14 years of age (8th form), 44 students were 15 years of age (9th form), 53 students were 16 years of age (10th form), 36 of the students were 17 years of age (11th form) and 12 of the students were 18 years of age (11th form).

DESIGN AND CONDUCT

A 29-item questionnaire was directly distributed to the students. Prior administrative and student consent were authorised. From the item questionnaire, 6 questions were descriptive and 23 items were measurement questions. Those items were rated on a five-point Likert scale ranging from 1 – *not at all* to 5 – *all the time.*

The data was collected directly from the schools, as first the principal's and the teacher's permission was recorded then the students were asked before class to fill in the questionnaire. All the students were issued confidentiality and all volunteered to fill in the questionnaire in the period March-May 2009.

RESULTS

FACTOR ANALYSIS

To determine the factor structure for student's attitude towards science and the student's science teacher methodology measured from his/her own perspective, an exploratory factor analysis was conducted using SPSS for Windows 15.0. For this analysis, cases were excluded pairwise and the analysis was carried out using principal component as the method of estimation and with an oblimin rotation. Two factors were assigned, like the number of the scales used in the survey. From Table 1 is seen that either factor may be associated with one of the scales, which allows the methods applied to be correctly assigned to the sample analysed.

The Kaiser-Meyer-Olkin Measure of Sampling Adequacy value was 0.842, exceeding the recommended value of 0.60 (Kaiser 1970, 1974). The Bartlett's Test of Sphericity (Bartlett, 1954) reached statistical significance ($p<0.001$), supporting the factorability of the correlation matrix.

Factor 1 accounts for 21.31%, and Factor 2 accounts for 10.18% of the total variance. Factor 1 that represents *student attitudes towards natural sciences* has the highest factor loading (above 0.76). It is located in the first column of the table. Factor 2 that represents *methods used by teachers in classes in those disciplines* is located in the second column of the table. The values of the eigenvalues for both factors, which are presented in Table 1, meet the requirement to be greater than 1.

To assess whether the 12 items of the *SA* scale (first factor) and 11 items of the *TM* scale (second factor) formed reliable scales, Cronbach's alpha was computed. Overall reliability for *Student Attitude* was 0.861 and for the *Teacher Methods* was 0.722. The results of reliability coefficients (Cronbach's alpha) indicate the two sets of items form scales that have reasonable internal consistency reliability.

TABLE 1. FACTOR STRUCTURE: THE FACTOR ANALYSIS OF 23 ITEMS, TOGETHER WITH FACTOR LOADINGS AND EIGENVALUE AND PERCENTAGE OF VARIANCE EXPLAINED FOR EACH FACTOR

Item	Factor loading	
	1	2
Feel good at science	**0.763**	0.128
Care how well I do in science class	**0.720**	0.012
I like answering questions in science class	**0.680**	0.131
Work in groups in science class	**0.678**	0.062
I study for my science class	**0.661**	0.147
I raise my hand in science class	**0.649**	0.250
I am proud of my work in science class	**0.637**	0.237
I like science class	**0.570**	0.226
If I study really hard for a science test, I do well	**0.488**	-0.093
I work harder in science class than in other classes	**0.460**	0.407
I care about doing well in school	0.367	-0.082
In my future career, I will need science	**0.272**	0.166
I do experiments in science class	0.047	**0.672**
The teacher does demonstrations in science class	-0.076	**0.593**
We build models in science class	0.150	**0.517**
We watch videos in science class	0.002	**0.391**
Work in groups in science class	0.163	**0.390**
On tests, science teacher gives credit for partial work	0.163	**0.344**
We use computers in science class	0.140	**0.325**
We play games/trivia's in science class	0.015	**0.279**
I choose the projects I work in science class	0.238	**0.256**
My science teacher includes effort in my marks	0.115	**0.199**
I admire my science teacher	0.104	**0.148**
Eigenvalues	4.901	2.341
% of variance	21.310	10.180

Notes: Data analyses using: Extraction Method: Principal Axis Factoring; Rotation Method: Varimax with Kaiser Normalisation; Factor 1 represents students attitudes towards natural sciences, Factor 2 represents methods used by teachers in classes in those disciplines; Loadings > 0.39 are bolded; Sorted by decreasing of the factor loading.

DIFFERENCES IN BOTH SCALES IN GENDER, AGE AND FORM

In order to measure the differences in both scales in following dimensions: gender of the student's friends in science class, own gender of students surveyed, age and form, variance analysis of data was made. Results are presented in Table 2.

TABLE 2. THE MEAN OF *STUDENT ATTITUDE* AND *TEACHER METHODS* SCALES

Mean	Student Attitude	Teacher Methods
Gender of the student's friends in science class		
Mostly girls	3.04	2.35
Half boys and half girls	2.92	2.41
Mostly boys	2.82	2.38
	-	-
Students gender		
Female	3.02	3.07
Male	2.83	2.26
	*	*
Students age		
14 years	3.00	2.44
15 years	3.01	2.33
16 years	2.90	2.43
17 years	2.92	2.31
18 years	2.96	2.52
	-	-
Students form		
8th form	3.09	2.42
9th form	2.88	2.33
10th form	2.95	2.45
11th form	2.92	2.36
	-	-

Notes: Low score represent low relevant importance, and high score represent high relevant importance (1 – minimum, 5 – maximum). Where there is a statistical significance, an asterisk appears beneath the relevant column. Data analyses using paired-samples t-test, ANOVAs and Turkey's HSD post hoc tests.

In order to examine how the variable *gender of the student's friends in science class* affects both scales, the persons surveyed were divided into following *three groups: 1) mostly girls, 2) half boys and half girls and 3) mostly boys.* The results show lack of statistically significant differences both for the scale of **student attitudes towards natural sciences** $F(2,165)=0.740$, $p=0.479$ and for the scale of **teacher methods** used in those classes $F(2,166)=0.235$, $p=0.791$.

In order to examine how the variable *age* affects both scales, the persons surveyed were divided into following *five groups*: *1) 14 years old, 2) 15 years old, 3) 16 years old, 4) 17 years old and 5) 18 years old*. The results show lack of statistically significant differences both for the scale of **student attitudes towards natural sciences** $F(4,164)=0.160$, $p=0.958$ and for the scale of **teacher methods** used in those classes $F(4, 164)=0.578$, $p=0.679$.

In order to examine how the variable *form* affects both scales, the persons surveyed were divided into following *four groups*: 1) in 8th form, 2) in 9th form, 3) in 10th form and 4) in 11th form. The results show lack of statistically significant differences both for the scale of **student attitudes towards natural sciences** $F(3,164)=0.662$, $p=0.577$ and for the scale of **teacher methods** used in those classes $F(3,165)=0.439$, $p=0.725$.

From the data presented in Table 2 is seen that only the variable *gender* is statistically significant for both scales examined ($p<0.001$). Girls have more possible attitudes towards natural sciences in comparison with boys and in their opinion teacher methods used by teachers in those classes are more varied.

In order to measure *gender differences in both scales in the dimension*: form (8th to 11th form), data analysis was made. Results are presented in Table 3.

TABLE 3. THE MEAN OF FORM FOR *STUDENT ATTITUDE* AND *TEACHER METHODS* SCALES FOR BOYS AND GIRLS

	Form			
Dimensions	8	9	10	11
All students				
Student Attitude	3.09	2.88	2.95	2.92
Teacher Methods	2.42	2.33	2.45	2.36
	*	*	*	*
Boys only				
Student Attitude	2.99	2.77	2.89	2.66
Teacher Methods	2.13	2.10	2.39	2.34
	*	*	*	*
Girls only				
Student Attitude	3.14	2.92	3.00	3.04
Teacher Methods	2.55	2.42	2.50	2.37
	*	*	*	*

Notes: Low score represent low relevant importance, and high score represent high relevant importance (1 – minimum, 5 – maximum). Where there is a significant effect on a relevant importance of SA and TM to a particular subgroup of students, an asterisk appears beneath the relevant column. Data analyses using paired-samples t-test.

The results from Table 3 show that *there are statistically significant gender differences* for both scales analysed with all persons surveyed from 8th to 11th form (*p*<0.001). It is necessary to note that the same trend is observed in gender differences both for girls only and for boys only (*p*<0.05).

In order to measure the effect of the dimension *age* (from 14 to 18 years) on the *gender differences in both scales*, data analysis was made. Results are presented in Table 4.

TABLE 4. THE MEAN OF AGE FOR *STUDENT ATTITUDE* AND *TEACHER METHODS* SCALES FOR BOYS AND GIRLS

Dimensions	Age				
	14	15	16	17	18
All students					
Student Attitude	3.00	3.00	2.90	2.92	2.96
Teacher Methods	2.43	2.33	2.43	2.31	2.52
	*	*	*	*	–
Boys only					
Student Attitude	2.88	2.98	2.74	2.83	2.76
Teacher Methods	2.45	2.09	2.32	2.28	2.41
Girls only					
Student Attitude	3.05	3.01	3.01	2.97	3.15
Teacher Methods	2.52	2.45	2.51	2.32	2.62
	–	*	*	*	–

Notes: Low score represent low relevant importance, and high score represent high relevant importance (1 – minimum, 5 – maximum). Where there is a significant effect on a relevant importance of SA and TM to a particular subgroup of students, an asterisk appears beneath the relevant column. Data analyses using paired-samples t-test.

The results from Table 4 show that *there are statistically significant gender differences* for both scales analysed with all persons surveyed between 14 and 17 years of age (*p*<0.001). It is necessary to note that the same trend is observed in gender differences both for girls only and for boys only (*p*<0.05). With all 18-year-old students surveyed, no statistically significant gender differences are observed between both scales (*p*=0.081).

This trend applies both to the group of 18-year-old girls (*p*=0.246) and to the group of 14– and 18-year-old boys (*p*=0.104, *p*=0.149).

In order to examine the opinion of all persons surveyed of *both scales*, analysis of data was made, with data being broken down by *gender*. Results are presented in Table 5.

TABLE 5. THE MEAN OF GENDER FOR *STUDENT ATTITUDE* AND *TEACHER METHODS* SCALES FOR ALL STUDENTS

	Gender	
Dimensions	Boys	Girls
All students		
Student Attitude	2.83	3.02
Teacher Methods	2.26	2.46
	*	*

Notes: Low score represent low relevant importance, and high score represent high relevant importance (1 – minimum, 5 – maximum). Where there is a significant effect on a relevant importance of SA and TM to a particular subgroup of students, an asterisk appears beneath the relevant column. Data analyses using paired-samples t-test.

The results show that statistically significant differences are observed (*p*<0,001) in *gender* in the answers of all persons surveyed with respect to both scales.

DISCUSSION AND SUMMARY OF RESULTS

It is an indisputable fact that each human being perceives and experiences in a different way his/her gender identity. Nevertheless, the survey presented is an attempt to examine the collective answer of students from Bulgaria of both genders. The results of the survey conducted confirm that girls and boys differ significantly in the attitudes they have towards natural sciences and in teacher methods used by their teachers in their classes in those subjects. Both measurement scales used find their expression in the two factors that constitute the factor analysis made.

It is an indisputable fact that the everyday contact of teachers in classes in natural sciences exercises essential influence on formation and development gender roles of students (Fennema, 1981). In scholarly literature, there are already studies performed that prove that if teachers are prepared and have the necessary knowledge, they can reduce gender differences in the class room (Sadker, Sadker & Klein, 2001). The results show that when teachers are sensible to gender differ-

ences and choice of teaching methods in physics classes of students in 11th form, the girls have more positive attitudes towards the subject and have higher marks (Labudde et al., 2000). This is also confirmed by a cited survey by the US National Institute of Education from 1984 (Sadker et al., 2001). According to it, teachers who have obtained preliminary training in equal attitude towards students of both genders not only reduce the level of manifestation of gender stereotypes in their work, but also become more efficient teachers as a whole. These teachers also give more often a more consistent feedback to the girls in their classes, communicate more often with them and become more sensible to the so called "branding" of students.

It is the university that is the institution in which future teachers of natural sciences and pedagogues are trained as a whole for work with students of both genders. It is necessary to include in their curriculum subjects that give to them knowledge of gender differences and assist the openness of self to gender diversity in the class room and to all its manifestations. It is necessary that the students are able to observe, analyse and overcome their own negative gender differences, to overcome the emergence of or to solve possible problems and conflicts during the contact between students of both genders.

The study in the university by future teachers of natural sciences of the gender differences of students will allow them to recognise and accept the **gender diversity** in the class room and society, to defend equal opportunities of students **of both genders**, to overcome sexism and gender discrimination, to assess and accept the gender diversity as a positive element for the society, which enriches and develops it, to facilitate the contact and interaction between children of both genders in and outside school with the purpose of development of abilities for efficient communication, to create a climate of mutual acceptance, tolerance, respect and mutual assistance. In order to facilitate the realisation by the pedagogy students of the prejudiced attitudes, an explanation only is not enough, no matter how satisfactorily and well it is structured. Methods are necessary, such as conducting a dialogue, critical debates, situations in which students are put in other people's place, questions, observations, solving cases and simulation games, i. e. activities through which they will give a new meaning of ideas, beliefs and values perceived passively and unconsciously.

The mission of the school, for the successful performance of which it needs social and institutional support, is to actively participate in a model for integration of all students – both boys and girls. For its realisation, it is necessary the university trains teachers of natural sciences and pedagogues who have to a sufficient extent a sensibility to gender differences in the class room and to problems of children of both genders, overcome their gender stereotypes, show tolerance to, understanding and acceptance of them.

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THE DEVELOPMENT OF CHILDREN'S IDENTIFICATION: A CROSS-CULTURAL COMPARISON BETWEEN BULGARIA, ITALY AND UKRAINE

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Abstract. *The study presented here analyses the development of self-categorisation, national, European and local identification of Bulgarian, Ukrainian and Italian children and adolescents growing up in Bulgaria, Ukraine and Italy.*
The sample consisted of 541 children aged 6, 9, 12 and 15 years. It was found that national, European and local identifications differ in the three national groups. It is argued that the cognitive-developmental account of the development of national identification is unable to explain the patterns of findings which were obtained. The social identity theory, however, is able to explain the different patterns of importance given to the different identifications by the three national groups.

Keywords: *self-categorisation, national identity, cross-cultural comparison*

INTRODUCTION

Every human being, besides its personal identity, possesses a number of *social identities* that ensue from its belonging simultaneously to a different group – national, gender, age, religious, ethnic, etc. They are internalised and represent a

significant part of the self-image of the person. For a human being to be a part of a given national group and to belong to it means to share its values, customs, traditions, rites, language and its territory, to hand them down from generation to generation and as if in this way to touch eternity. In so far as the participants in the cross-cultural relations are representatives of different national groups, the examination and revealing of the nature of the process of formation of national identity during childhood turn out to be undoubtedly necessary. It is the comparison of this process in the case of children from Bulgaria, Italy and Ukraine that this article is dedicated to.

Two theories are mainly applied in scholarly literature when explaining the results obtained from empirical investigations of development of national identity in childhood. These are the social cognitive theory (Aboud, 1988) and the social identity theory (Tajfel, 1978). Both theories will be presented in brief.

SOCIAL COGNITIVE THEORY

The social cognitive point of view (Aboud, 1988) that is based on Jean Piaget's theory pays attention to the universal cognitive processes and to the social experience – a result of the interaction between sociocultural variables and the level of cognitive development, reached by the individual. Aboud (1988) and Milner (1996), referring to the results obtained from a study performed on majority children in countries with multicultural composition, suggest the presence of a stable developmental construct.

In the beginning of 1950s, J. Piaget and A. Weil (Piaget & Weil, 1951) conducted a study, which turned into a classical one, on the **relationship between regional and national identity** of children aged 4 to 15 years, who lived in Geneva. Analysis was made of their understanding of the terms "from Geneva" and "Swiss". In authors' opinion, the development of national identity is based on the relation between "whole" and its "parts" and the child until the age of 10-11 years does not know that the logical categories may be included into other, bigger ones.

In the beginning of 1960s, G. Jahoda (Jahoda, 1963) investigated how children aged 6 to 12 years from Glasgow realise what it means to be a citizen of this city, to be a Scotsman or Briton. In his opinion, the children understand the hierarchical relations and interrelations at a much earlier age. They know that "women" and "men" are "people", that "fruit" and "vegetables" are "foods", etc. Hence, small children realise that they can be simultaneously "boy", "brother", "man". According to G. Jahoda, Piaget and his collaborators are wrong when arguing that children cannot build a notion of national relations because of their inability to work with logical inclusion before the age of 10-11 years.

The existing investigations (Barrett & Short, 1992; Barrett, Wilson & Lyons, 2003) show that before the age of 5 years the children have little knowledge of their own country and national group. After the age of 5 years, they usually know the name of their own country and national group, and start to categorise themselves as members of their own national group (Bennett, Lyons, Sani & Barrett, 1998). During middle childhood, children's knowledge of the people who belong to their nationality is expanding considerably (Bennett, Lyons, Sani & Barrett, 1998; Barrett & Short, 1992; Katz, 1976; Piaget & Weil, 1951) and at an age of about 10-11 years they can describe many of the stereotypical characteristics that are ascribed to the members of their own and of other nationalities, such as typical bodily features, clothes, habits, behaviour, psychological, religious and political convictions (Bennett, Lyons, Sani & Barrett, 1998; Barrett & Short, 1992; Barrett, Wilson & Lyons, 2003). At the age between 5 and 11 years, the degree of identification with the national group also increases.

In recent years, several studies have underlined how variations in the development of national identifications occur as a function of the specific country in which the children live (Barrett, 2007; Inguglia et al., in press). However, while all these studies were focused on national level, very few researches have considered the other levels of identification such as European and local ones.

- *National identity*: the sense of belonging to the nation based on cognitive and affective aspects as regards the national ingroup and outgroups (Barrett, 2000).
- *European (supranational) identity*: the sense of belonging to the Europe based on the beliefs, opinions, feelings and attitudes about European continent (Cinnirella, 1997).
- *Local identity*: the sense of belonging to the place where everyone grew up (generally, the *city*); it is based on the circumstances, environment, traditions, values, family obligations and interactive and affective styles of this place (Arnett, 2002).

These identities have shown to have a multidimensional nature (Ashmore et al., 2004), including three basic elements:

- *Self-Categorisation*: identifying self as a member of, or categorising self in terms of, a particular social group.
- *Importance*: the relative subjective importance of a particular group membership to the individual's overall self-concept.
- *Degree of identification*: the degree, from low to high, with which a person categorises self in terms of a particular social group.

As an alternative to the social cognitive theory, some authors propose the Tajfel's social identity theory (SIT).

SOCIAL IDENTITY THEORY

Social Identity was defined by Tajfel (1981) as "that part of an individual's self-concept which derives from his (her) knowledge of his (her) membership of a social group (or groups) together with the value and emotional significance attached to that membership" (1981, p. 255).

The positive characteristics ascribed to the in-group lead to a positive self-evaluation. If the identification with the group is weak or absent, this phenomenon will not appear. For example, if somebody belongs to a group of low social status, he or she will have difficulties in acquiring a positive evaluation of their in-group. Tajfel proposes the example of the research carried out by Goodman (1964), analysing the preference of white and black persons on the part of 3– and 5-year-old children. Results showed that 92% of white children showed preference for their in-group and only 26% of black children preferred their in-group. The fact that the black children at such an early age prefer the white people is a reflection of the rapid and early assimilation of norms and values of the social environment in which they live, and where some groups are more evaluated than others. According to the SIT, there are some cognitive processes thanks to which the differences between the members of the in-group disappear while the differences with the members of out-groups are underlined. Thus, the SIT considers that the in-group favouritism is a psychological consequence of the internalised belonging to the in-group.

According to Tajfel (1978), it can be said that each social group provides to children a concrete social identity based on a determinate representation of the world as well as a set of values, attitudes, believes and actions that corresponds to the social representation.

National identity in particular is a complex psychological structure that encompasses a number of **cognitive and affective aspects**. The **cognitive aspects** include: knowledge of the national groups and territories, child's categorisation as their member, symbols (the national flag, anthem, etc.), customs, traditions, historic events and national heroes who have turned into a nation's symbol, beliefs of the typical features of the members of the national group and the knowledge of to what extent the child resembles the national type. The **affective aspects** include: importance that is ascribed to national identity, devotion to national territory, sense of belonging to national community, feelings towards compatriots and a number of social emotions such as national pride, shame, guilt, etc. (Barrett, Wilson & Lyons, 2003; Barrett, 2007).

According to Smith & Bond (1998), the most important function of national identity is that it **provides knowledge to the people as to who they are, who the others are and where they are from**. During the process of socialisation, people develop devotion to nation and support for a unique culture, share values, symbols, traditions and meanings. According to M. Billig (Billig, 1995), the term

"national identity" is a social term which covers customs, beliefs and behaviour from the social life with a strong emotional component. This part of identity is expressed in everyday life although this is not often recognised.

THE CONTEXT OF THE STUDY

Bulgaria, Italy and Ukraine are historically different countries. Ukraine became independent only after the dissolution of the Soviet Union in 1991 and it is still not a member of EU. Italy is one of the founding states of EU, and Bulgaria was admitted to the Union on 1 January 2007. The data was collected in Palermo, Kharkiv and in Sofia, respectively.

The purpose of the present study was to analyse developmental aspects and differences in national, European and local identities between children/adolescents living in Bulgaria, Italy and Ukraine, as measured by self-categorisation, relative subjective importance and degree of identification.

We expected to find context-related differences between Bulgarian, Italian and Ukrainian children, which could be summarised as follows:

Bulgarian and Italian children used more easily national and regional identities than the Ukrainian ones.

Italian adolescents used more easily the European identity than the Ukrainian and Bulgarian ones.

There was no difference between Bulgarians, Italians and Ukrainians with reference to the local identity.

METHOD

PARTICIPANTS

The participants were 541 children of Bulgarian, Ukrainian and Italian origin aged 6, 9, 12 and 15 years: 162 of Bulgarian origin, 159 of Ukrainian origin and 220 of Italian origin. There was approximately the same number of children at each age: 129 6 years old, 139 9 years old, 127 12 years old and 146 15 years old. 281 children were male, and 260 were female.

From **Bulgaria**, there participated in the investigation: 40 children 6 years old, 41 children 9 years old, 40 children 12 years old and 41 children 6 years old. Totally 89 children were male, and 73 were female.

From **Ukraine**, there participated in the investigation: 37 children 6 years old, 40 children 9 years old, 27 children 12 years old and 53 children 15 years old. Totally 75 children were male, and 84 were female.

From **Italy**, there participated in the investigation: 52 children 6 years old, 58 children 9 years old, 58 children 12 years old and 52 children 15 years old. Totally 117 children were male, and 103 were female.

PROCEDURE AND MATERIAL

Participants were interviewed individually.

The following measures were used.

- ⚜ *Self-categorisation.* Participants' self-categorisations were measured using a set of cards with the name of specific self-descriptors: (a) *Bulgarian/Italian/Ukrainian* for national groups; (b) *European* card; (c) *inhabitant of Sofia/Palermo/Kharkiv* for local groups; (d) *6 years old*, *9 years old*, *12 years old* and *15 years old* for age; (e) *boy* and *girl* for gender. Two boxes labeled 'Me' and 'Not Me' were used. Interviewer spread the set of cards out in front of the participants in a different randomised order. The latter had to put the cards which described them in the 'Me' box and all the ones which did not describe them in the 'Not Me' box. A score of 1 was assigned to each card chosen.
- ⚜ *Relative subjective importance.* All cards in the 'Me' box were placed face up on the table and children/adolescents were asked to choose just one card which was the most important to them. Then, participants were asked to choose the next most important card again. The procedure was repeated until only one card remained. Scoring was the following. The first-ranked card = 1, the second = 2, and so on. The value assigned to each of the cards not chosen from the total set of 5 cards was the average of the remaining ranks up to rank 5.
- ⚜ *Degree of identification.* The extent of participants' identification with *national category* was measured using 1 set of 4 cards. With reference to the set concerning national identity, children were presented with the following four cards: *very Bulgarian/Italian/Ukrainian, a little bit Bulgarian/Italian/Ukrainian, not at all Bulgarian/Italian/Ukrainian* and *don't know.* The participant was asked: "Which one of these cards do you think best describes you?". Scoring was as follows: *very* = 3, *a little bit* = 2, *not at all* = 1.

RESULTS

SELF-CATEGORISATION

In order to examine the relative importance ascribed to each of the five categories by countries, different statistical analyses were made. The mean values obtained are presented in Table 1, with the smaller values reflecting greater importance of the respective category, and the superscript letters show if there is a difference between scores for different ethnoses (see notes below the table).

TABLE 1. MEAN VALUES OF THE IMPORTANCE ASCRIBED TO EACH OF THE FIVE CATEGORIES BROKEN DOWN BY COUNTRY

Identity	Mean		
	Bulgaria	Ukraine	Italy
Age	2.80 [b]	2.78 [b]	2.92 [b]
Gender	2.36 [a]	1.89 [a]	2.02 [a]
City	3.35 [c]	2.75 [b]	2.82 [b]
Nationality	2.30 [a]	2.32 [c]	2.96 [b]
Europe	4.19 [d]	4.31 [d]	4.28 [c]
	*	*	*

Notes: Low scores represent high relevant importance, and high score represent low relevant importance; (1 – minimum, 5 – maximum); where there is a statistically significant effect of category, an asterisk appears beneath the relevant column of five figures, and the specific location of the significant difference within the column of five figures is shown using superscript letters, with mean scores which do not differ significantly from one another sharing the same superscript letter; data analysed using Kruskal-Wallis tests and Bonferroni-corrected post hoc Mann-Whitney tests.

In order to investigate if statistically significant differences are observed between children from the three countries in the importance they ascribe to the five identities examined, the Kruskal-Wallis tests were performed for each age group. The data is presented in Table 2.

With the _6-year-old children_ from the three countries, no statistically significant differences are observed in the choice of gender and local (which city they are from) identity. The "age" category is of greater importance to children from Ukraine in comparison with children from Bulgaria. National identity is more often chosen by Bulgarians and Italians and definitely more seldom chosen by Ukrainians. European identity is most important to children from Ukraine and most unimportant to children from Italy.

With all _9-year-old children_ studied, the five categories examined are statistically significant. The age identity is most important to children from Ukraine and most unimportant to children from Italy. Gender and local (which city you are from) identities are most important to children from Ukraine and Italy and most insignificant to children from Bulgaria. Opposite is the trend that is observed in national and European identities. They are of greatest importance to Bulgarians and most insignificant to Ukrainians and Italians.

With all _12-year-old children_ studied, no statistically significant differences are observed in the choice of age, local (which city you are from) and European identity. Gender identity is most important to children from Ukraine and most unimportant to children from Bulgaria. National identity is most important to Bulgarians and least significant to Ukrainians and Italians.

TABLE 2. MEAN VALUES OF THE IMPORTANCE ASCRIBED TO EACH OF THE FIVE CATEGORIES BROKEN DOWN BY COUNTRY AND AGE

Age group/country	Mean				
	Age	Gender	City	Nationality	Europe
6 years old					
Bulgaria	2.75 [b]	2.03	3.03	2.75 [a]	4.45 [a,b]
Ukraine	1.68 [a]	2.43	2.95	3.86 [b]	4.14 [a]
Italy	2.25 [a,b]	2.15	2.79	3.04 [a]	4.77 [b]
Mean	2.24	2.19	2.91	3.19	4.49
	*			*	*
9 years old					
Bulgaria	2.71 [a,b]	2.95 [b]	3.56 [b]	1.78 [a]	4.00 [a]
Ukraine	2.23 [a]	2.18 [a]	2.75 [a]	3.20 [b]	4.70 [b]
Italy	3.28 [b]	2.14 [a]	2.36 [a]	2.78 [b]	4.45 [b]
Mean	2.81	2.39	2.83	2.60	4.39
	*	*	*	*	*
12 years old					
Bulgaria	3.00	2.35 [b]	3.33	2.28 [a]	4.05
Ukraine	3.24	1.45 [a]	2.97	3.10 [b]	4.34
Italy	3.43	1.91 [a,b]	2.97	3.03 [b]	3.72
Mean	3.25	1.94	3.08	2.81	3.97
		*		*	
15 years old					
Bulgaria	2.73 [a]	2.12 [b]	3.46 [b]	2.41 [a]	4.27
Ukraine	3.72 [b]	1.53 [a]	2.49 [a]	3.15 [b]	4.11
Italy	2.63 [a]	1.87 [a,b]	3.19 [b]	3.02 [b]	4.23
Mean	3.05	1.82	3.01	2.90	4.20
	*	*	*	*	
Total					
Bulgaria	2.80	2.36 [b]	3.35 [b]	2.30 [a]	4.19
Ukraine	2.78	1.89 [a]	2.75 [a]	3.32 [c]	4.31
Italy	2.92	2.02 [a]	2.82 [a]	2.96 [b]	4.28
Mean	2.84	2.08	2.96	2.87	4.26
		*	*	*	

Notes: Low scores represent high relevant importance, and high score represent low relevant importance; (1 – minimum, 5 – maximum); where there is a statistically significant effect of country, an asterisk appears beneath the relevant column of three figures, and the specific location of the significant difference within the column of three figures is shown using superscript letters, with mean scores which do not differ significantly from one another sharing the same superscript letter; data analysed using Kruskal-Wallis tests and Bonferroni-corrected post hoc Mann-Whitney tests.

With all *15-year-old children* studied, statistically significant differences are not observed only in the European identity. The "age" category is most important to children from Bulgaria and Italy and most insignificant to children from Ukraine. Gender identity is most important to Ukrainians and of least significance to children from Bulgaria. Local (which city you are from) identity is most important to children from Ukraine and most insignificant to children from the other two countries. National identity is most important to Bulgarians and less significant to Ukrainians and Italians.

When examining the *mean values* of the children from the four age groups from the three countries, it becomes clear that no statistically significant differences in terms of age are observed in the choice of age and European identity. Gender and local (which city you are from) identities are most important to children from Ukraine and Italy and least significant to Bulgarians. In the choice of national identity, the children from Bulgaria, Ukraine and Italy form three independent and unrelated groups. National identity is of greater importance to Bulgarians, there follow children from Italy, and it is of least significance to children from Ukraine.

NATIONAL IDENTIFICATION BY COUNTRY AND BY AGE GROUP

In order to establish if the level of national identity is different for children from Bulgaria, Ukraine and Italy, chi-square analyses were made and the Pearson coefficient was calculated. Results from Table 3 show that there are statistically significant differences in the structure of answers to the question of national identity with children from the three countries (χ^2=83.75, *df*=6, *p*<0.001, *N*=541, *Phi*=0.278).

TABLE 3. National identification broken down by country

Answer	Bulgaria	Ukraine	Italy
Not at all	3	24	4
A little bit	9	45	44
Very	147	79	166
Don't know	3	11	6
Total	162	159	220

Results presented in Table 3 show the different way in which children from Bulgaria, Ukraine and Italy perceive their national identity. The majority of children from the three countries feel their national identity clearly expressed. In the second place, children from Ukraine and Italy feel *a little bit* Ukrainians/Italians. It is the fact that a considerable part of Ukrainians do not perceive themselves at all as Ukrainians that the differences between the answers that children from the

three countries give are expressed in. The number of the *don't know* answers is also different for children from the three countries. Children from Ukraine show it most often.

Results of national identity of children studied from the three countries, broken down by age, are presented in Table 4.

TABLE 4. NATIONAL IDENTIFICATION BROKEN DOWN BY COUNTRY AND AGE GROUP

| Country | National identification | | | | |
	6 years old	9 years old	12 years old	15 years old	Total
Bulgaria	2.75 [b]	3.00 [b]	2.95 [c]	2.93 [b]	**2.91 [c]**
Ukraine	1.81 [a]	2.10 [a]	2.55 [a]	2.77 [b]	**2.37 [a]**
Italy	2.77 [b]	2.76 [b]	2.84 [b]	2.65 [a]	**2.76 [b]**
Mean	2.54	2.64	2.80	2.77	2.69
	*	*	*	*	*

Notes: The lower scores show the less importance of the national identification (1 – minimum, 3 – maximum); where there is a statistically significant effect of age on a national identification, an asterisk appears beneath the relevant column of three figures, and the specific location of the significant difference within the column of three figures is shown using superscript letters, with mean scores which do not differ significantly from one another sharing the same superscript letter; data analyses using ANOVA and Tukey's HSD post hoc tests.

Data from Table 4 are statistically significant for all children of the four age groups. At the *age of 6 and 9 years*, national identity is most important to children from Bulgaria and Italy and less significant to Ukrainians. At the *age of 12 years*, children from the three countries form three independent groups, with the Bulgarians ascribing greatest importance to national identity, there follow the Italians, and it is of least significance to children from Ukraine. The same is the order when determining the importance of national identity by means of *mean values* of the answers given from the three countries. With the children aged 15 years, it is most important to Bulgarians and Ukrainians and of least significance to children from Italy.

DISCUSSION AND SUMMARY OF FINDINGS

From the comparative study of children from Bulgaria, Ukraine and Italy it becomes clear that to all of them *gender identity* is most important, with the Bulgarian children also emphasising the big importance they ascribe to their *nationality*. Children from Italy categorise themselves more often with their European iden-

tity than children from Bulgaria and Ukraine. In their early childhood the Italians ascribe greater importance to their regional (which city you are from) identity than children from Ukraine. At the age of 15 years, children from Ukraine and Italy show similarity in choices made. Logically, to all 15-year-old children studied, most important category is *gender*.

In the process of formation of national identity of the children studied from Bulgaria, Ukraine and Italy, following three clearly expressed trends are observed. With children from Ukraine, with the increase of age, the importance they ascribe of national identity also increases. To children from Bulgaria, most important proves to be national identity at the age of 9 years, when it marks its peak, and with children from Italy, this happens at the age of 12 years, whereupon a slight falling trend is observed.

Ukraine is a relatively new state that formed after the dissolution of the former USSR in 1991. This fact explains the differences that are observed in the answers given by children from Ukraine and Italy with respect to their national and European identity. Ukraine is still not a member of EU unlike Italy that is a full member since its establishment. It is this fact that explains the choices made by children from the two countries. From results obtained, it may be concluded that during middle childhood, differences in identification of children are observed according to cultural environment in which they socialise and develop, and in the period of adolescence, similar psychological constructs are observed for all children studied.

As a whole, national identity is most important to children from Bulgaria, then to children from Italy and in the third place to children from Ukraine. Only the Bulgarian children are unanimous in their answers and categorise themselves as *very Bulgarian*. The main part of children from Italy categorise themselves as *very Italian*, and another part of them show that they are *a little bit Italian*. Children from Ukraine, a newly formed state, logically show that they categorise themselves through their national identity to a great extent, a great part of them state that they feel Ukrainians to a low extent, and a part of them do not feel Ukrainians at all.

In brief, these findings seem to support our hypotheses that: (a) Bulgarian children use more easily national identity than the Italian and Ukrainian ones; (b) Italian adolescents use more easily the European identity than the Ukrainian and Bulgarian ones; (c) Italian and Ukrainian children use more easily local identity than the Bulgarian ones or the local identity become the most salient and important for Ukrainian and Italian children and adolescents, showing different scores compared to Bulgarians. Thus, it seems that during childhood and early adolescence there are differences in the identification processes according to the cultural context in which the people grow up, whereas some common psychological patterns seem to emerge in middle adolescence.

Among the main factors that influence the acquisition of knowledge of own nationality are factors from the social environment such as *the school, the school subjects that are taught in it, the family, the overseas trips, the books, the mass media and the circle of classmates and teachers* (Barrett, 2007). Sociopsychological studies with adults show that the degree of national identification changes under the influence of a number of factors such as intergroup relations, presence of conflicts on ethnic or national basis and the way in which the social situation, in which the in-group is, is received (Brown, 1995; Oaks, Haslam & Turner, 1994). Something more, in laboratory studies performed, it has been established that these variables are found in and influence children, too (Bigler, 1995; Nesdale, 2001). Since these are studies performed in a laboratory, it should be borne in mind that the variables are close in terms of value. It is necessary for us to know to what extent the reasons directly influence the formation of national identity and to what extent they are transferred through the social environment and the notions that the adults keep of the national group of belonging.

The development of national identity understood as a complex system of knowledge, beliefs and feelings takes place for years, encompassing the period of childhood and adolescence, and is retained during adultness/whole path of life. To build and keep positive national identity, to include qualities such as equality, tolerance and co-operation into their values, to overcome prejudices, stereotypes and discrimination on national basis, children need the support by teachers and family. Cultural pluralism that is characterised by mutual regard and respect between two or more ethnic or national groups is the road to future peaceful co-existence on the planet.

In conclusion, a big challenge to social knowledge is the performance of studies in intercultural aspect. The problems of multiethnic societies with the interrelations between ethnic and national groups will be increasingly interesting and topical from scholarly point of view.

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THE INTERPERSONAL COGNITIVE PROBLEM SOLVING APPROACH FOR PRESCHOOLERS: MODELS FROM DIFFERENT CULTURES FOR YOUNG CHILDREN

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Abstract. *Children's ability to produce effective solutions to the problems related with their interpersonal relationships in their daily lives and to develop these problem-solving skills is closely concerned with their level of social adaptation, emotional satisfaction. It is observed that children who display behavior problems in preschool education settings usually lack interpersonal problem-solving skills. The lack of these skills hinders the development of peer relationships and positive interaction with adults. These skills are teachable to teachers and parents to help children learn ICPS skills and how to use those when real problems came up. Children could learn ICPS skills and generalize them their newly acquired skills. Encouraging children to think like this would in our view, add to their understanding of what they do in interpersonal situations. ICPS is an extremely promising approach for promoting pro-social competence. Prevention of behavior problems in children and because of the for development of social competence is an important issue many of these models is needed to identify. In this study from different cultures in recent years research of results carried out of the qualitative analyzing the results will be discussed.*

Key Words: *Interpersonal problem solving, social skills, preschool education.*

INTRODUCTION

Pre-school education aims at contributing to the child's physical, cognitive, emotional and social development; and thus growing healthy children who are able to realize their potentials.

All aspects of development are closely related to each other. For a child to be a socially and emotionally adaptable individual throughout the life influences his/her cognitive functions and academic achievement. For individuals to live independently within the society and to increase their quality of life is mostly dependent on their interpersonal relationships. Social skills enable the individual to adapt to the society, to integrate with the society, and to communicate with his/her peers and other individuals. In addition, they improve academic skills and facilitate the rise of achievement in these skills.

There is a consensus on the issue that the individuals who are skillful in social behaviors gradually become productive, respectable and successful individuals.

PROBLEM SOLVING AS A SOCIAL SKILL

The human needs to learn to live in a complex society composed of individuals who have similar, different and even conflicting needs, and to interact with other individuals. This interaction is a process which contains reciprocity that might influence the parties' emotions, thoughts and behaviors in positive or negative ways (Öğülmüş, 2001).

Vygotsky emphasizes on social interactions as the sources of development (Karpov, 2003). According to Vygotsky, the psychological development moves from the social level to the individual level. The social world guides the child's development (Miller, 1993).

In order to understand the child's development, it is needed to understand how the child is grown in the society. According to Vygotsky, the system of thinking is not a product of only the internal factors but also of the cultural institutions and social interactions. Children learn the cultural facts through social activities. In this respect, the cognitive development needs social interactions.

Gardner argues that the respectful mind sees and respects the inter-individual and inter-group differences, since it is impossible today for a person to maintain a life in seclusion from others. The respectful mind tries to understand "others" and seeks ways to cooperate with them. Gardner suggests that the reactions such as respecting others emerge in the very early periods of life.

A model about how children use their problem solving skills is presented in the Chart 3 with developmental indicators and example behaviors, and the developmental indicators related to taking initiatives/ entrepreneurship are presented in the Chart 4. The model contains a cyclical structure about developing expectations towards producing solutions, defining the problem, producing solutions

with tools such as producing alternatives and negotiation in the dimensions of thinking and behavior, and what should be taken into consideration in situations of agreement and disagreement.

1.2. CHART 1. USING PROBLEM SOLVING SKILLS

Developmental Indicators	Example behaviors
1-Discovering problems	The child may express / define his/her personal problems
2-Making efforts to solve the problems	The child may modify his/her acts according to a new information or a new situation (e.g: may change the construction against the threat of downfall or vibration of the blocks in the construction game). The child may modify his/her behaviors according to the reactions of other children or adults.
3-Working with others to solve problems	The child cooperates with others in making decisions (e.g: may decide which game to play with friends). Suggests solutions to the problems with other children, decides whose turn is first and next.

1.2 CHART 2 TAKING INITIATIVES / ENTREPRENEURSHIP

Developmental Indicators	Examples
1-Starting interpersonal relations with others	Invites his/her friends to the game. Joins the game while the friends are playing. Participates in group activities Suggests new game activities.
2-Making decisions inde-pendently	May select the materials for the project Assists others. Warns others when they make mistakes, corrects their mistakes.
3-Presents autonomous behaviors during activi-ties, training routines and games.	Hangs his jacket up when s/he arrives at school. Likes to often play alone. Accomplishes the task given/ finishes the task s/he started.

I CAN PROBLEM SOLVING PROGRAM

The "I CAN PROBLEM SOLVE" program, which is based on the cognitive approach and aims at providing individuals with interpersonal problem solving skills, was developed by Shure (1992).

This education approach has been especially applied to children. The approach basically emphasizes on different thinking skills as the tools of social par-

ticipation and adaptation in children. The most important feature of the approach is that it teaches children how to think, rather than what to do or what to think, in the decision-making process related to problem-solving.

The ICPS approach is widely used with children and adults in places such as schools and hospitals. The problems are diverse; such as impulsivity, hyperactivity and social exclusion in children and adolescents, and increasing problems in social interactions and interpersonal relations in adults. Though it has a wide application area, most of the ICPS researches focus on children and especially little children. One of the advantages of this method is that it is easy to include it in pre-school or elementary school programs. It prevents little problems to grow up. The ICPS programs contain various social-cognitive skills. The ICPS researchers focus generally on two main thinking skills. These are; finding alternative solutions and thinking by considering the result. These two thinking skills seem to be closely related to the adaptation of small children. Children who are weak in finding alternative solutions and who show impulsive and aggressive behaviors implement only one strategy to attain what they desire and to solve the problems that they face, and thus, they show the tendency to use force when they fail (Erwin et al., 2005).

New approaches to analyze behavioral problems in children use the social skill training as an intervention tool especially in alleviating interpersonal problems.

A significant relationship has been found between children's pre-social problem solving strategies in the pre-school period and their social acceptances in the kindergarten and even in the first or second grades of the primary school. In addition, it is accepted that a relationship exists between social cognition and social behavior, and thus the peer acceptance is an important variable to comprehend these relationships in children's nature (Miller-Musun, 1993).

As Spivack and Shure's "Inter-Personal Problem Solving and Clinical Theory" model indicates, if children are able to learn how to solve typical everyday problems, they will less likely be impulsive, introvert, aggressive or antisocial. It is very important for these behaviors to be prevented in adolescence. Although educators and clinicians argue that the alleviation of emotional stress may help the individual's right thinking, the ICPS suggests the opposite, that is, the right thinking skill alleviates the emotional stress.

According to Shure (1996), the ICPS helps children in:

- Thinking about what to do when they have problems with another person,
- Thinking about different solutions to solve the same problem,
- Thinking about the possible results of what they do,
- Deciding if an idea is good,
- Comprehending that other people have emotions and thinking about their emotions.

Among the problem solving pre-skills, the words of "same" and "different" are the problem solving words that will help children to think in the way of "DIFFERENT people may feel DIFFERENT about the SAME thing". Moreover, children learn that there exist *different* ways to solve the *same* problem.

2.2 CHART 3. THE CONTENT OF PROBLEM SOLVING SKILLS TRAINING PROGRAM

Courses	Problem Solving Pre-Skills
1-10	Teaching the vocabulary of the program (IS, IS NOT, SOME-ALL, SAME-DIFFERENT)
11-18	Assisting children to know their and others' emotions (HAPPY, SAD, ANGRY)
19-22	Encouraging the children to develop skills related to listening and paying attention
23-28	Introducing the concepts of WHY-BECAUSE, MAYBE-PERHAPS to the children
29-31	Teaching to acknowledge individual differences and learn others' choices.
32-33	Helping children to figure out what is HONEST or JUST or not..
Courses	Problem Solving Skills
34-38	Alternative solutions: Helping children to understand what the problem is and to learn to produce numerous possible solution producing ways.
39-50	Possible solutions: Helping children to learn sequential thinking as the pre-requisite to understand cause-effect relationships.
51-59	Matching the possible solutions with the possible effects: Providing children with the possibility to practice to see the linkage between a possible solution and a possible effect.

RESULTS OF RESEARCHS FROM DIFFERENT CULTURES

It is suggested that several negative problem behaviors which are not approved by the society (lack of impulsive control, inability to postpone pleasure, inadequacy in coping with failure, corrupted friend relations, low empathy skill etc.) start in the pre-school period; thus it is important to put emphasis on preventing social behavioral problems at early ages.

Webster-Stratton, Reid and Hammond (2001) worked with 99 children who were between 4-8 years of age and having behavioral disorder. Those who were in the experimental group were given social skill training and problem solving training. After the training, a significant decrease was observed in the extroversion problems of the children in the experimental group in the home environment. They presented less aggressive behaviors and developed more positive problem

solving strategies at school. In the follow-up study conducted one year later, it was observed that the significant changes after the training were still present.

In a study aiming at decreasing aggressive behaviors in pre-school children, the teachers were taught rational methods that they can use while dealing with children who present aggressive behaviors. After this training, when children presented aggressive behaviors, the teachers gave them instructions in which they explained that hitting others may cause injuries, the children will not like those who hit them, and it is better to think about alternatives rather than hitting. Further observations indicated that the aggression in these children has decreased compared to others who had not received the above mentioned instructions and their cooperation with peers has increased (Zahavi and Asher, 1974, quoted by Urbain and Kendall, 1980).

Oden and Asher (1977) oriented 3rd and 4th grade students who were socially alone with a three-step social skill training program. After the study, it was found that the trained children were sociometrically more accepted by their friends. In the follow-up study, it was determined that the skills that had been taught were used and continuing to improve.

Heppner et al. (1983) have studied the cognitive differences between children's self-evaluations. It was found that the children who consider themselves to be effective problem solvers have more positive self-concept, know themselves better and criticize themselves less than the others do.

There are numerous studies on the effectiveness of the social skill training. For example, in a study conducted by Lochman, Coie, Underwood and Terry (1993), the effect of the social skill training program on aggressive and non-aggressive two groups of children rejected by their friends was examined. It was found in this study that the examined social skill training program had influence on aggressive and rejected children, the aggressive behaviors of these children have decreased, they were less rejected and their friendship relations have increased.

The problem-solving skill in interpersonal relations is a skill which must be supported during the pre-school period and whose effects last throughout the entire life.

Hune and Nelson (2002), based on teachers' observations, conducted a study on children aged 4-5 years and showing risky behaviors in terms of developing antisocial behavioral problems. After the study, they have found that the trained group produced solutions that contain more of positive social behaviors and their aggressive behaviors have decreased, compared to the other group which had not been given training.

Erwin et al. (2005) worked with 31 elementary school children aged 7-8 years. The experimental group was given six sessions ICPS training during three weeks. The children were assessed in the dimensions of producing alternative

solutions and thinking by considering the result in three social conflict situations. After the study, a significant difference was found between the post-tests of experimental and control groups in favor of the experimental group. A significant relationship was also found between the points of producing alternative solutions and thinking by considering the result. The researchers are in consensus on the fact that the intervention-based approaches are generally effective in preventing social behavioral problems and these interventions need to be done in early years (Loeber, 1990; Walker, Colvin and Ramsey, 1995; Walker and Sylwester, 1991).

In the study of Bridget et al. (2007) conducted on 2282 pre-school children and 597 pre-school teachers, the teachers have expressed that they have more problems with the children who exhibit behavioral problems. It was determined in this study that the conflicts occurring in interpersonal relations are the main predictors of children's academic and social adaptation.

Dinçer (1995) have determined that the alternative solution suggestions that the children who were aged 5 years and given interpersonal cognitive problem solving training produced against interpersonal problems in the dimensions of mother-child problems and peer problems were significantly higher than those of children who were not trained.

It has been determined that improving children's skills to produce effective solutions to everyday social problems is closely related to the social adaptation level, emotional satisfaction and happiness. Researches have also determined that, as a result of improving interpersonal problem solving skills, several characteristics of children have improved such as role taking skills, leaning to positive social behaviors, increasing in-group functionality in the classroom, focus of control, general social adaptation and peer acceptance (Erwin, 1993). Along with the Spivack and Shure's traditional method, it has been observed that numerous short-term intervention methods have created effective changes in children's cognitive skills.

It is observed that the children who exhibit behavioral problems in preschool education environments mostly lack social skills and interpersonal problem solving skills. The lack of social skills in the early period is closely related to the school achievement, interpersonal relations, and adult functionality problems in the consequent years (Parker and Asher, 1987). Answering the demands of the social environment usually requires problem solving (Durlak, 1983). The children who are unable to develop these skills are rejected by their peers and have negative interactions with adults (Wittmer et al., 1996). These negative experiences negatively affect children to develop positive social behaviors, to improve problem solving skills and their academic achievements.

It is suggested that those children who have interpersonal problem solving skills are disappointed less, show less anger when they fare ill, are not aggressive,

consider other people more, are more eager to share and are more able to make friends (Shure, 1996).

The possibility for the children who have not learned how to solve interpersonal problems that they face in their daily lives to behave impulsive, introvert, aggressive or antisocial is higher. However, it is very important for such behaviors to be prevented in the pre-school period, because it is known that these pioneer behaviors pave the way for more serious problems in the development of peer relationships and further personal adaptation skills.

The ICPS program focuses on children's problem solving skills. In this approach which aims at growing thinking children; the children are not taught how people feel or what they do. A thinking child can assess how people feel, can decide what to do, and can decide if an idea is good or bad.

The studies in the literature indicate that, since they gained the problem-solving thinking skill, the emotional discomforts, introversions, and aggressive behaviors of children who are given the ICPS training have decreased significantly and their social adaptations have increased. It is also indicated that these children are able to better cope with the feeling of frustration, to defend their rights more appropriately, to obtain what they desire in an easier and more suitable way and to cope with difficulties better (Shure, 1999).

Shure and Spivack (1982), based on the findings that they got from many studies that they conducted, suggest that as children learn to solve the problems that they face in their interpersonal relations in the daily life; their impulsive, aggressive and disruptive behaviors will significantly decrease.

Barkley et al.(2000), in their study in which they tested the effectiveness of psychoeducational intervention programs for pre-school children who exhibit disruptive behavior disorder, supported the children attending kindergarten in different situations. These situations are; no intervention, family education, and full-day therapeutic intervention in the classroom. Children in different groups were monitored for nine months and, before and after the intervention, assessed through CBCL (The Child Behavior Checklist), TRF (Teacher Report Form) and the direct observation form. The research findings have indicated that the attention and aggression problems of the children who had been in the situation of full-day therapeutic approach have significantly decreased. These findings show that the psychoeducational intervention program implemented in the kindergarten can significantly reduce disruptive behaviors.

It has been determined in the literature that the problem solving skill programs have become effective in little children especially to reduce their extroversion problems (Mc Mahon, 2000). These educational intervention programs focus on general behavioral adaptation rather than behaviors such as aggression or violence. In another study, teachers were given training and a program-based intervention was implemented within the scope of a project aiming at support-

ing and improving pre-school children's resiliency. The children in this intervention program were given training on issues such as expressing their emotions, understanding others' emotions, communication skills, producing non-violent solutions to the problems in interpersonal relations, decision-making and competence skills. It was determined after the research that the extroversion problems of the children have decreased significantly (Dubas et al.1998, quoted by.Mc Mahon, 2000).

CONCLUSION AND RECOMENDATIONS

Along with the individual difficulties that the children who have behavioral and emotional problems and their families experience, the cost of mental health problems for the society is also high. In order to alleviate childhood mental problems, the intervention should start in early periods in which symptoms do not yet appear.

The pre-school years are critical years for development in terms of the development of communication, social interaction, language skills, and self-esteem. In the pre-school period, educational environments provide the child with opportunities such as social interaction, imitation and playmateship, and adequate models to develop adaptive behaviors; in order for the child to develop his/her behavioral patterns (Odom, 2000).

Since they are critical years for development, monitoring and assessing children's behaviors in the pre-school period are very important to support growth and to prevent possible problems (Weisz and Eastman, 1995; quoted by. Erol et al. 1998).

The child learns the first social relations in the family. This relation is later developed and shaped through play and school environments. The findings of the studies conducted by Cohn, Patterson & Christopoulous, (1991); Pettit and Mize, (1993); and Putallaz (1987) indicate that the parental and family love and support, and responsible family attitudes have effects on children such as having positive view of life and having positive expectations from their relations with others. Children who grow up in such family environments have high level of social competence and positive and accepting interactions with their peers.

In order to improve individual development and social acceptance, it is necessary for programs that support important competence skills such as analyzing the problems in interpersonal relations in a way in which both parties win, self-regulation, social competence, adaptive behavior, decision-making and resiliency to be started in the pre-school period with early training programs. To reach this end, it is necessary, by being benefited from the contemporary literature, to develop programs that are culture and value specific, creative, effective, efficient, multi-module and supporting all areas of children's development.

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CAREER OUTCOME EXPECTATIONS: THEIR SIGNIFICANCE IN GREEK ADOLESCENTS' CAREER DEVELOPMENT – A CORRELATIONAL, CROSS-SECTIONAL STUDY

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Abstract. *Career Outcome Expectations is a distinct and important though underresearched variable of the Social Cognitive Career Model (SCCM, Lent, Brown, & Hackett, 1994). The goal of this study was to investigate the relationship between career outcome expectations and career barriers, another variable that acts as a moderator in the SCCM. We firstly hypothesized that positive outcome expectations are negatively correlated with perceptions of career barriers and secondly we hypothesized that negative outcome expectations are positively correlated with perceptions of career barriers. The sample included 15 and 16-year-old Greek adolescents (N=306). For the purposes of the study a Career General Outcome Expectations Questionnaire and a Career Barriers Questionnaire were constructed and adjusted to the Greek adolescent population. The results showed, first, that positive outcome expectations are neither correlated with nor predicted by career barriers and, second, that negative outcome expectations are negatively correlated with and negatively predicted by career barriers. The results are discussed concerning future research and practice career implications.*

Keywords: Social Cognitive Career Model, Career Outcome Expectations, Career Contextual Barriers.

INTRODUCTION

The Social Cognitive Career Model includes a comprehensive and path-analytic approach to career choice selection and implementation (e.g. Lent, Brown, & Hackett, 1994, 1996, 2000). Person inputs, such as gender and ethnicity, back-

ground contextual affordances, such as critical daily events, learning experiences, agency variables (e.g. self-efficacy, outcome expectations) and other contextual factors (e.g. supports and barriers) are complicatedly interrelated formulating career interests, goals and actions. The person is an agent who purposefully constructs her/his own actions, outcomes, values and personality, improving her/his performance and reaching out attainment points. Considerable research and practice evidence has shown that outcome expectations play a core role during this career route (Ali, McWhirter, & Chronister, 2005. Fouad & Guillen, 2006. Gore & Leuwerke, 2000).

The outcomes of the desirable consequences of intentional acts in which the person choose (μήπως λάθος ορθογραφία;) to get involved (Bandura, 2001), are defined to be the outcome expectations. Career outcome expectations are the desirable (positive outcome expectations) or the undesirable (negative outcome expectations) consequences of the person's intentional career actions. They are considered to directly affect interests, intentions and actions (Fouad & Guillen, 2006).

Outcome expectations may take three forms which are the *physical outcomes* (e.g. physical sensations that are pleasant or cause discomfort, see after pain experiences and a car crash respectively), the *social reactions* (positive, such as approval, independence, monetary reward, prestige or negative ones such as deprivation of privileges or social disapproval/rejection) and the *self-evaluations* which take the form of self-satisfaction (positive self-evaluation) and self-criticism (negative evaluation), without excluding from nuances of neutral or other-level self-ratings.

The [career] outcome expectations are measured by if/then statements (Fouad & Guillen, 2006) or by phrases such as "In the future it's probable that… [e.g. I'll have independence in my job position]", which Katsikis & Syngollitou, (2005. see also Katsikis, 2006, unpublished data) found that operationally capture the construct of perceived outcome expectations in the general Greek adolescent population (15-16 years old). Lent and Brown (2006) proposed a psychometrically sound background for the construction of SCCT measurements such as outcome expectations.

However, Bandura (1997, p. 23) cautioned for the differentiation of outcome expectations and performance. The latter represents the pragmatic outcome of person's actions (e.g. the actual number of person's weight loss) while the former refers to the *evaluative* value of this outcome, that is the healthy physical outcomes, the positive social reactions and the self-evaluations of that weight loss.

According to the emerging bibliography, outcome expectations contribute significantly and, in some cases, uniquely, to the career decisions and career choices of the person (Ali & Saunders, 2009. Fouad & Guillen, 2006. Kelly, Gunsalus, & Gunsalus, 2009). The unique contribution of outcome expectations appears in non performance-bound domains (usually non-traditional ones), where

the choice(s) of the person is influenced more fully by the perception of the probable outcomes than the perception of her/his efficacy [a major determinant of outcome expectations (Bandura, 1977, 1986)] in that domain.

The construct of career outcome expectations consists of learning and motivational components that guide person during his career exploration and career construction process. There are three motivational sources that contribute significantly to the strength and the duration of career outcome expectations, that is a) the natural-incentive value of the perceived outcome, b) the symbolical thinking of the person (e.g. "What might happen when I make a choice?") which leads to assumptions for the probable final outcome of that choice, and c) the vicarious learning through modeling of different role models that receive different career outcomes.

Outcome expectations have a scientific history of, almost, a century. They were introduced by Tolman (1932) through his expectancy theory where he alleged that behavior is mediated by a cognitive component, that is a cognition *expected* by and determine person's actions. Consequently, the person learns to guide his behavior through goal-directed action and through repeated performance.

Twelve years later, a collaborative scientific work by Lewin, Dembo, Festinger and Sears (1944), featured novelty of the task, personal ability, personal engagement and past performance as the basic determinants of the final level of aspiration (achievement) of the person. The person expects to have a final [career] outcome according to the above factors so that he/she decides which [career] actions to engage in.

Atkinson (1957) through his expectancy-value theory noted that the difficulty of the task and the importance of succeeding in it are the major determinants of behavior, whereas Rotter (1966), through his Locus of Control theory of personality, empirically supported the hypothesis that the person will have different behavioral outcomes if he/she has an interior (self-conscious, based on effort, for example) or an exterior (other-guided, based on luck, for example) locus of control.

Finally, Bandura integrated the above concepts in his Social-Cognitive Theory (1977, 1986, 1997) and stressed the importance of *personal agency* in the final outcomes of human action, establishing that self-efficacy expectations predict the outcome expectations of the agent. However, as it is established in the career literature (Fouad, Smith & Zao, 2002. Gore & Leuwerke, 2000. Lent, Brown, Nota, & Soresi, 2003), career outcome expectations, sometimes, have a unique contribution to career behavior if the outcome is not strongly linked to performance.

One of the most underresearched facets of SCCT model is the connection between outcome expectations and contextual barriers, which act as moderators in the interest and choice formulation.

Career contextual barriers are the events/circumstances, real or/and perceived, that hinder and possibly complicate the components of learning process (cognitive, emotional, behavioral) during career exploration (e.g. Fuqua, Blum, & Hartman, 1988. Gati, Krausz, & Osipow, 1996. Hijazi, Tatar, & Gati, 2004. Lindley, 2005. Swanson & Woitke, 1997. Tien, Wang, & Liu, 2009). Career barriers may be internal, external or both (Gottfredson, 2002. Paa & McWhirter, 2000. Swanson & Gore, 2000. Swanson & Woitke, 2000).

Career barriers may take the forms of financial difficulties, of lack of support from important others (family, school etc.), of race and ethnic discrimination, of lack of personal abilities and skills and of lack of educational opportunities.

Career barriers may lead to career difficulties, irrational career approach and psychopathology during career choice and performance (e.g. stress, anxiety, personality disorders, depression because of low career self-efficacy and high career outcome expectations: See e.g. Gati, Krausz, & Osipow, 1996. Luzzo & Hutcheson, 1999), which may result in choice failure.

During high school (15-17 years old), adolescents begin to formulate interests more strongly, learn to explore career alternatives more intensely and are better in compromising options for a career choice (Coleman, 1993. Gottfredson, 1981. Super, 1990. Vondracek, Lerner, & Schulenberg, 1986). Adolescents expand their decision-making skills, augment their sources of career information and usually face barriers and supports that hinder or facilitate their constructive career efforts (Ojeda & Flores, 2008. Punch, Hyde, & Creed, 2006. Tien, Wang & Liu, 2009). It is during this period (Seligman, 1994) that a career choice prominence is fully expressed and unfolded, because of their overall social-cognitive maturation in problem solving skills and abstract thinking. The purpose of this study was to investigate the relationship between career outcome expectations and career barriers of 15-and-16-year-old Greek adolescents. This study is a part of a wider study concerning the cross-sectional investigation of relationships between core variables of the SCCT model.

Goals and Hypotheses

⚜ *Goal 1*: The first goal was to investigate the possible relationships between the positive outcome expectations and the career barriers in a sample of mid-adolescents.

⚜ *Hypothesis 1*: We hypothesized that positive outcome expectations are negatively correlated with career barriers.

⚜ *Goal 2*: The second goal was to investigate the possible relationships between the negative outcome expectations and the career barriers in a sample of mid-adolescents.

⚜ *Hypothesis 2*: We hypothesized that negative outcome expectations are positively correlated with career barriers.

METHODOLOGY

Sample

According to stratified randomized sampling procedures (Cohen & Manion, 1994), 306 15-and-16-year-old Greek adolescents of six daily public junior high and high schools in the district of Thessaloniki, Greece, were chosen as the participants of this study. The sample was representative of the urban and semi-urban areas of the district of Thessaloniki. 144 of the participants were boys, and 162 were girls. 148 of the participants were 9th graders, while 158 were 10th graders.

Measures

For the purposes of this study, two questionnaires were constructed, the Career Outcome Expectations Questionnaire and the Career Barriers Questionnaire (Katsikis, 2006, unpublished data. Katsikis & Syngollitou, 2005). The former contains 22 items and three subscales according to the exploratory factor analysis conducted. These subscales are the *General Career Outcome Expectation Scale* (*a* = .86), the *Career Success Outcome Expectations Scale* (*a* = .88) and the *Negative Outcome Expectations Scale* (*a* = .67). The latter includes 23 items and five subscales according to the exploratory factor analysis conducted. These subscales are the *Career Indecision Scale* (*a* = .85), the *School-as-a-Barrier Scale* (*a* = .70), the *Parents-as-a-Barrier Scale* (*a* = .63), the *Parents' Profession-as-a-Barrier Scale* (*a* = .80) and the *Information Seeking-as-a-Barrier Scale* (*a* = .69).

    The selection of items and the names of subscales were based on selected literature for career barriers and difficulties (e.g. Chaves, Diemer, Blustein, Gallagher, DeVoy, Casares, & Perry, 2004. Gati, Krausz και Osipow, 1996. Jones, 1989. Kourtides, Brikas, Pashalides, Roumpides & Papadopoulos, 2004. Lent, Brown, & Hackett, 1994. 1996. 2000. Lindley, 2005) and career outcome expectations (e.g. Dimitropoulos, 2002. Johnson, 1995. Kourtides, Brikas, Pashalides, Roumpides & Papadopoulos, 2004. Lent et al., 1994. 1996. 2000, 2001. Seligman, 1994) for the representation of the functional definition of each theoretical construct. The subscales of Career Outcome Expectations Questionnaire include items that capture the social and self-evaluative features of outcome expectations' forms and are expressed in a positive and a negative format (positive and negative outcome expectations respectively). Physical outcomes were not included. Furthermore, distal outcome expectations are examined, concerning the distinction made by Lent, Brown, Brenner, Chopra, Davis, Talleyrand, & Suthakaran, (2001) on different correlations between variables if the outcomes expected are either *distal* or *proximal*. Finally, the subscales of the Career Barriers Questionnaire include internal (career indecision) and external types of barriers (e.g. parents, school), as a more comprehensive way of measuring the construct.

Sample items from the Career Outcome Expectations Questionnaires include: "In the future it's probable that I'll get the successful career I expect as an outcome" (positive outcome expectation) and "In the future it's probable that I'll not get the work satisfaction I expect as an outcome".

RESULTS

According to Kolmogorov-Smyrnov statistical test (Chakravart, Laha, & Roy, 1967), the distribution of the sample is the normal one (p=.867).

We found that mid-adolescents generally perceive medium outcome expectations (see TABLE 1), according to the statistical median of each subscale.

First, adolescents perceive general career outcome expectations of medium strength (*Mean* = 41.4, *S.D.* = 7.9, *Median* = 41.0), for example they believe that they'll finally manage to make a career in the future, either through education or work, and that they'll have some development to that career. Also they perceive that they'll make a career (successful or not) even though they have enough money for living for the sake of their aspirations, of their interests in meeting other people and of their educative achievement orientation.

Second, they perceive career success outcome expectations of medium strength (*Mean* = 29.7, *S.D.* = 6.4, *Median* = 30.0). For example, they believe that they'll generally be independent, they'll earn their living through a satisfied monetary reward, and approved by their work and social context, they'll be satisfied and independent, they'll have get a high social status, they'll get a high work and social prestige and they'll evaluate positively themselves setting new goals and getting high job positions in the future.

Third, they perceive negative outcome expectations of medium strength (*Mean*= 11.9, *S.D.* = 2.6, *Median* = 12.0). For example, they believe that they'll not have the expected education, work and full career in the future, as they imagine it right now.

TABLE 1. DESCRIPTIVE STATISTICAL DATA FOR THE CAREER OUTCOME EXPECTATIONS QUESTIONNAIRE IN TOTAL SAMPLE (*N*=306)

SUBSCALES	N	Minimum	Maximum	Mean	S.D.
General Career Outcome Expectations	276	21.0	55.0	41.4	7.9
Career Success Outcome Expectations	298	13.0	40.0	29.7	6.4
Negative Career Outcome Expectations	300	3.0	15.0	11.9	2.6

Before the examination of the relationships between Career Outcome Expectations and Career Barriers, it's important to cite the descriptives of the subscales of the Career Barriers Questionnaire. TABLE 2 shows that mid-adolescents perceive medium-to-high career barriers according to the statistical median of each subscale.

First, adolescents perceive medium career indecision (*Mean* = 26.9, *S.D.* = 8.9, *Median* = 27.0). For example, they perceive that they moderately lack career decision-making skills, that, usually, they feel undecided about their career future, that sometimes that's due to their general indecisiveness, and that sometimes they feel unable, frustrated, helpless and lonely during their career decision making process.

Second, adolescents perceive school as a medium-to-high career barrier (*Mean* = 9.1, *S.D.* = 3.7, *Median* = 8.0), for example they moderately-to-highly perceive that they don't receive the expected overall school support for their career planning.

Third, adolescents perceive parents as a medium-to-high career barrier (*Mean* = 74, *S.D.* = 3.5, *Median* = 6.0), for example they moderately-to-highly perceive low parental encouragement, low parental expectations about their career and lack of parental role models as opportunities for career readiness. They also moderately-to-highly perceive that their parents underrate their career talents and that this fact sometimes maybe a barrier for them during career planning.

Fourth, adolescents perceive that parents' profession as a medium-to-high career barrier (*Mean* = 3.4, *S.D.* = 2.2, *Median* = 2.0), that is, they moderately-to-highly perceive that their fathers' and mothers' professions hinders them during the career decision-making process.

Finally, adolescents perceive that the way the seek career information is a moderate career barrier for them (*Mean* = 5.3, *S.D.* = 2.2, *Median* = 5.0).

TABLE 2. DESCRIPTIVE STATISTICAL DATA FOR THE CAREER BARRIERS QUESTIONNAIRE IN TOTAL SAMPLE (*N*=306)

SUBSCALES	N	Minimum	Maximum	Mean	S.D.
Career Indecision	286	11.0	52.0	26.9	8.9
School as a barrier	302	4.0	20.0	9.1	3.7
Parents as barriers	298	4.0	20.0	7.4	3.5
Parents' Profession as a barrier	302	2.0	10.0	3.4	2.2
Information-seeking as a barrier	301	2.0	10.0	5.3	2.2

Goal 1 and Hypothesis 1

Concerning our first goal and first hypothesis we found (see TABLE 3 below) that positive career outcome expectations (general career outcome expectations and career success outcome expectations) are not significantly correlated with the subscales of career barriers using the pearson *r* correlation coefficient. The relationships found were negative, according to our hypothesis (see *Hypothesis 1*), but statistically non-significant and the lowest we expected.

According to TABLE 3, General Career Outcome Expectations are not significantly correlated with Career Indecision (*r*=-.08), with School-as-a-Career Barrier (*r*=-.02), with Parents-as-a-Career Barrier (*r*=-.10), with Parents' Profession-as-a-Career Barrier (*r*=-.07) and with Information-Seeking-as-a-Career Barrier (*r*=-.08).

Furthermore, Career Success Outcome Expectations are not significantly correlated with Career Indecision (*r*=-.11), with School-as-a-Career Barrier (*r*=-.02), with Parents-as-a-Career Barrier (*r*=-.08), with Parents' Profession-as-a-Career Barrier (*r*=.00) and with Information-Seeking-as-a-Career Barrier (*r*=-.07).

Goal 2 and Hypothesis 2

Concerning our second goal and second hypothesis we found (see TABLE 3) that negative career outcome expectations are significantly and *negatively* correlated with all the subscales of career barriers using the pearson *r* correlation coefficient. The relationships found were not in accord with our hypothesis (see *Hypothesis 2*), but statistically significant in *p*<.01 level.

In detail, we found that Negative Outcome Expectations are negatively correlated with Career Indecision (*r*=-.40), with School-as-a-Career Barrier (*r*=-.19), with Parents-as-a-Career Barrier (*r*=-.22), with Parents' Profession-as-a-Career Barrier (*r*=-.21) and with Information-Seeking-as-a-Career Barrier (*r*=-.28).

TABLE 3. PEARSON *r* CORRELATIONS BETWEEN SCALES OF CAREER BARRIERS AND CAREER OUTCOME EXPECTATIONS QUESTIONNAIRES (*N*=306).

SUBSCALES	General career expectations (N = 306)	Career expectations of success (N = 306)	Negative expectations (N = 306)
Career Indecision	-.08	-.11	**-.40****
School as a barrier	-.02	-.02	**-.19****
Parents as a barrier	-.10	-.08	**-.22****
Parents' profession as a barrier	-.07	.00	**-.21****
Information-seeking as a barrier	-.08	-.07	**-.28****

** Correlation is significant at the 0.01 level (2-tailed)

We finally found, through the conduction of five simple linear regression analyses (table not included) that all subscales of the Career Barriers Questionnaire (Career Indecision, School, Parents, Parents' Profession and Information-seeking) negatively predict the subscale of negative outcome expectations from the Career Outcome Expectations Questionnaire.

DISCUSSION

Concerning our first hypothesis that positive outcome expectations are negatively correlated with career barriers, we found that positive career outcome expectations are not statistically correlated with all career barriers scales.

This result was an unexpected finding for this study and, firstly, maybe due to the fact that we measured the *distal* outcomes students perceive for their possible career directions (Lent et al., 2001). The students don't seem to connect their present perceptions of barriers with their future outcomes because of their temporal distance or their lack of information that barriers may hinder them towards formulation of outcome expectations. Career barriers are more possible to be related with the temporally *proximal* outcome expectations (Lent et al., 2001).

Furthermore they may try to formulate more stable outcome expectations during their exploration years (Super, 1990) and, as it is the case with the more permanent and changeable career aspirations during adolescence (e.g. Seligman, 1994), they may struggle to compromise their career options (Gottfredson, 1981, 2002) by being not ready to realize more stable outcomes for their career lives.

Also, career barriers, as they were measured in this study, maybe are less important for this sample to relate them with their final career outcomes. This maybe true concerning the role of self-efficacy (it was not measured in this sample) that may account for the non-statistically significant correlations between outcome expectations and barriers.

Also, these students may hint some coping efficacy abilities (e.g. McWhirter, 1997), that is, they perceive medium-to-high career barriers without influening their efforts to perceive outcome expectations.

The same maybe true concerning our second goal and hypothesis, where we found that students *negatively* relate the negative outcome expectations with all the career barriers scales. That was also an unexpected finding concerning the negativity of correlation but not about the correlation status at all.

Firstly, negative outcome expectations emerged as an important and distinct construct for the adolescents of this sample. Futhermore, negative outcome expectations are noted as an important and distinct construct in bibliography (e.g. Fouad & Guillen, 2006) and their role is not fully unfolded yet. However, Fouad & Guillen (2006) stressed the importance of further investigation of this construct.

In this sample, students perceive that even though they hold medium-to-high career barriers it's *not* probable that they'll *not* have positive career outcome. For

example, even though they perceive that parents don't encourage their career plans at a moderate strength level, they'll finally manage to *not to* fail in their career and in their educative and occupational future.

We'd also hypothesize for the perceived barriers as an opportunity or a challenge for career identity construction that students with adequate levels of self-efficacy often promote. This view partly explains the trend of relating the negative outcome expectations with the career barriers.

It's true that many adolescents, during this stage, have considerable self-confidence in their ability to cope with the barriers they encounter (e.g. McWhirter, 1997). Though, it's not so clear why they follow the non positive way (by relating the negative outcomes with the "negative" barriers) and they just don't relate positively these two theoretical constructs. Possible explanations are that they may be confused or misguided/unguided or/and that it is a culturally embedded practice (that is, to think of the negative or disoriented point-of-view first than for the positive and optimal one), something that's often met in Greek laymen's notions about future career options: "Who cares for what's in next five years? We don't even know if we'll be alive till then. The most important is *not to fail*; I don't know what the future will bring to me, so I'll move myself forward just by waiting for the events happen to me".

We'd also promote the hypothesis that negative outcome expectations are a type of barrier that needs further research and practice consideration, concerning low career maturity, irrational approach during career exploration, career difficulties or career diffusion (see e.g. Gati, Krausz, & Osipow). This may be true because of the adolescents' natural trend to idealize (e.g. Blackhurst, Auger, & Wahl, 2003; Seligman, 1994) the final outcomes of their perceived career and because of the strong correlation between the negative outcome expectations and the career indecision scale (r=-.40) we found, that contains items for irrational approach in career decision making.

Nevertheless, we may also hypothesize for the opposite one, that is, these students, even though they leave unrelated the positive outcome expectations and the career barriers, they are trying paradoxically to instill career hope for the final career outcome by showing they'll find their career way during their career route.

CONCLUSIONS

In this study we found that 15-and-16-year-old adolescents hold career outcome expectations of moderate strength and they perceive several internal and external career barriers of moderate-to-high strength. Also, we found that future positive career outcomes are not related to present perceptions of real and perceived career barriers while negative outcomes are related with a negative way to the career barriers of the present.

According to Lent et al. (2001) there is no considerable evidence yet for the patterns of correlations between outcome expectations and career barriers and this seems an important consideration for further investigation in the future. Also, other forms of outcome expectations, either general or in bound to specified domains, need to be investigated in relation to a wide array of career barriers.

Of particular importance is the subsequent detailed investigation of the role of negative outcome expectations the ways they are connected with other important variables (e.g. career contextual supports) during career exploration and later during career attainments of students and workers. A developmental and longitudinal dimension of these investigations need to be established for the fuller understanding of the developmental patterns of the correlations from childhood till the adult years.

INTERVENTIONS

According to correlations between negative outcome expectations and career barriers found in this study, practitioners need to consider the inclusion of negative outcome expectations (distal and proximal) in their career education programs and interventions. Practitioners need to screen for negative outcome expectations and how these negative perceptions are related to career barriers encountered by each intervention sample concerning the strength of correlations as a decision-making policy for the inclusion of appropriate experiential activities and techniques. Even though the most of the correlations between negative expectations and barriers found in this study were of medium-to-low strength (r=-.40 till r=-.19), they were statistically significant (at the .01 level) and they may be considered during career education program design and implementation. This may go together with the self-efficacy and the coping efficacy screening of at-risk (e.g. choice failure) populations that need focused guidance and support.

Furthermore, practitioners may directly investigate for different forms of outcome expectations that participants hold and for the possibility that these expectations are connected to personal and contextual barriers.

An additional task is the empowerment of positive outcome expectations and the investigation of possible connections between positive expectations and barriers (in this study students seem not to relate positive outcome expectations to career barriers). This would be the case, for example, with field trips and job shadowing experiences for occupations/jobs that adolescents hold positive or/ and negative outcome expectations.

Moreover, general and domain-specific negative outcome expectations need to be elaborated during individualized and /or group counseling process.

Finally, practitioners are cautioned towards further construction and utilization of reliable and valid measurements for the assessment of process and outcome efficacy and efficiency of counseling interventions because of the multidimensionality of the theoretical construct of career outcome expectations.

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EFFECTIVENESS OF SOME MODELS OF WORK ORGANIZATION IN CHILD CARE INSTITUTIONS

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Abstract. The structure and work organization of institutions in which the personnel take care for children in early childhood in Bulgaria are arranged by organizational regulations according to standard. The purpose of this study is to examine experimentally the effectiveness of especially established models of work organization in four institutions in the all country – three of them are experimental and one control social establishment. Characteristics of staff and working conditions as job stress and load satisfaction, self-confidence at work, psychosomatic complaints, coping strategies, social support, work-load, were explored. The obtained results show that the most effective organizational models are those by which working environment is improved, time for rest is ensure, high quality leadership and management style ensure social support, recognition at work and possibility to participation in decision making. These experimental models in combination with programs stimulating children's development and relationships with care takers improve the level of child development in explored institutions.

Keywords: work and occupational organization, job stress, social support, leadership style, institutional care and child development

INTRODUCTION

In Bulgaria there are 30 social establishments comprising about 3000 children aged 0 – 3, deprived of parental care. The personnel consist of doctors, nurses, rehabilitation therapists, hygienists, educators, psychologists, nannies, janitors. One person usually take care of about more then 13 children. This fact effect exlusively on the level of neuro-psychic and social development and health status of the children.

Social dimentions of the work environment such us characteristics of clients; relationships with colleagues, the leaders and administration, can provoke frustration, stress and burnout syndrome in the personnel and some consequences of social-emotional deprivation in children reared in this institutions.

In three of examined child care institutions were provided some organizational exchanges to decrease a high risk of developing burnout of health care professionals working there (Tzenova, Kostadinova, 2005). It was given more autonomy and responsibility over carried out the tasks by staff and the leadership style of the managers was transformed to more democratic forms. Team development and establishment of regular team-meetings, having the possibility to participate in change processes, reducing the workload by decrease of shift duration, rest organization improvement and prophylactic's means for an optimization of the hygiene and occupational conditions were done. Life of children in one of establishments (Russe) was organized in "family model".

PURPOSE

To reveal the effectiveness of especially established models of work organization in child care institutions (three of them are experimental and one control social establishment) by exploration of intensity, frequency and total job stress of the staff, the level of burnout, load satisfaction, self-confidence at work, psychosomatic complaints, coping strategies, social support and care quality measured by the developmental level of children reared in these institutions.

MATERIAL AND METHODS

145 caretakers (nurses, educators, psychologists, doctors) from 6 institutions in 4 towns from different regions of the country were investigated. Their mean age is 38 years and mean length of service is 11 years. The follow methods were applied: Developmental scale for early childhood; Job Stress Survey (by Spielberger, Reheiser, 1994); Langner questionnaire of psychosomatic complains; Maslach Burnout Inventory (1981), 3 subscales-Emotional exhausion, Dehumanization, Personal Accomplishment; Social support (3 items); Screening for risk assessment of static load at the working place (Draganova, Mincheva, Stantchev 2003), timing of work activity. Interviews were conducted to explore the differences in leadership styles.

RESULTS

The results show that organizational improvements increase the resources, such us social support, to deal with difficulties, conflicts and problems on work place. The dimensions of workload intensity pressure and lack of support are lower in social establishments (Russe, Debelez, Sv. Iv. Rilski) in which improvements were provided (table 1)

TABLE 1. DIFFERENCES IN WORK UNIT (SE) AND WORKLOAD INTENSITY DIMENSIONS

Workload intensity dimension, F, p		Work pressure F 5.655, p .000		Lack support F 5.694, .000		Total intensity F 7.177, .000	
Soc. establishment:	N	Mean	± SD	Mean	± SD	Mean	± SD
1 Sv.Paraskeva	28	52,17	10,33	52,43	15,66	156,22	33,43
2 Sv.Sofia	19	47,57	16,41	52,28	19,27	158,58	52,14
3 Sv. Ivan Rilski	13	39,38	8,49	46,75	16,32	131,00	32,84
4 Debelez	21	32,38	20,80	33,21	16,97	90,57	47,16
5 Plovdiv	25	50,08	14,17	58,70	13,23	169,26	37,05
6 Russe	20	47,75	13,74	49,30	13,60	146,52	36,26
Total	126	45,74	15,93	49,36	17,43	145,67	46,19

The average frequency of the experienced stressors (30 explored stress events) is lower than their intensity (the average intensity score of stress is 4.86 on a 9-point scale), mean values 2.5-3 times for the last six months. There are remarkable differences between the control social establishments and others and these in the bigger towns (Sofia and Plovdiv) Total intensity of the potential job stressors and the frequency of their experience are up to 80% higher. The intensity of the stress events (job pressure and lack of social support) is much in personnel working in department where growth infants, than in departments where growth toddlers (total score 162.4 against 125.7). Some reasons of these results are improvement of team climate and work satisfaction in experimental groups.

The most frequent potential stress events despite of inadequate salary, are following stressors:

- Insufficient personnel to adequate handle an assignment (5,75)
- Noisy work area (5.58)
- Lack of recognition for good work (5.45)
- Making on-the-spot decision (5.35)
- Assignment of increased responsibility (5.34)
- Inadequate support by supervisor (5.1)
- Personal insult from colleagues (5.0)

The most frequency experienced stressors, especially among the nurse personnel are Noisy work area (5.54), Insufficient personnel to adequate handle an assignment (4.92), Covering work for another (3.92), Performing tasks not in job description (3.4).

The significant problems are mainly organizational, that can be overcome with little additional costs, fact confirming by provided interventions. They should be considered as directions for future improvement of the working environment.

The differences in the experienced stressors determine the different patterns of the experienced burnout symptoms (table 2).

TABLE 2. CORRELATIONS OF JOB STRESS AND WELL BEING DIMENSIONS AMONG THE CHILD CARE PERSONNEL (N = 153)

Job stress	Intensity pressure	Frequency pressure	Frequency Lack of support	Intensity Lack of support	Total frequency	Total pressure
EE – Burnout	,415**	,357**	,466**	,381**	,468**	,336**
DP – Burnout	,271**	,279**	,314**	,322**	,331**	,332**
PA – Burnout	-,224*	-,177	-,076	-,130	-,147	-,130
Burn Index	,415**	,357**	,466**	,341**	,466**	,352**
Complaints	,373**	,266**	,351**	,388**	,313**	,394**

Correlations are significant at * p = 0.05 level and ** p = 0.01

The scores on the burnout dimensions Emotional Exhaustion and Dehumanization are higher in the capital city and the bigger towns and in the departments for toddlers. The lowest burnout index was found in the experimental homes and those from small towns. It was confirmed that the high workload, low autonomy, little support are some of the reasons of developing burnout (Naring, van Droffelaar, 2005). Burnout expression is closely related to some personality characteristics as neuroticism, psychoticism. The trait extraversion is positively related to the feeling of personal accomplishment at work.

Intensity and frequency of the different job stressors are closely correlated to psychosomatic health status measured by burnout syndrome and psychosomatic complains (p < 0.001). These factors result negatively on work satisfaction. High level of job stress impact on the quality of relationships with children causing disturbance of attachment with adults. These reflect on the quality of connections with peers, particularly on the socialization.

The results of the investigation by Screening for risk assessment of static load at the working place (Draganova, Mincheva, Stantchev, 2003) and timing of work activity show that the great deal of working time occupy the feeding of children and changing the clothes, wash and give a bath of toddlers. The personnel is engaged with the children (in playing activity, social relationships, educating activities) in small part of the working day. The above mentioned factors lead to low level of children's psychic development. The occupational physiological measurements and screening method for risk classification show a low level of health risk of personnel. Despite of this result the level of fatigue and psycho -somatic complaints is high. The lowest level of complaints was established in

experimental group of institutions (lower than 15%). Specially elaborated courses of conflict-resolving and team development training applied in experimental establishments improve individual capacity and well-being of personnel and lead to decrease of the level of complaints and dissatisfaction on work place.

CONCLUSION

The simultaneous implementation of job stress prevention on individual, group and organizational level can promote a healthy work environment, satisfied workers and prosperous childcare with successful child's socialization in long term. Redusing the number of children being responsible for, providing of more consistent caregiving environment per each child, taking a part in the decision making for organizational exchanging, social support on work place, were recommended to improve motivation of personnel.

Most effective ways to increase the satisfaction at workplace and to decrease job stress and burnout are: implementation of special program for professional selection, organization of training courses for conflict solving and communicative skills; improvement of working conditions; training in team work.

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STUDY REGARDING THE EVALUATION OF STUDENTS' ATTITUDE TOWARDS A SOCIO-CONSTRUCTIVIST TEACHING APPROACH

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Abstract. *Establishing the effectiveness of teaching achieved in the circumstances of passing from an instructive-educational approach, centered on the teacher, to an approach centered on the student that would subscribe to modern paradigmatic, socio-constructive trends, in the frame of the continuous development of modern information and communication technologies implies a thorough knowledge of the students' capabilities and cognitive abilities, as well as of the best attitude towards a modern teaching approach. The purpose of our investigation is to determine the motivational-cognitive potential of students, in order to achieve a modern teaching approach, based on modern information and communication technologies and interactive teaching strategies. As to achieve the study we have employed the questionnaire based inquiry, using as a tool the creative motivation questionnaire, elaborated by Paul Popescu Neveanu, a questionnaire that evaluates positive attitudes that are favourable to a constructive-creative activity. The analysis of the motivational-cognitive potential of the subjects has been performed from the point of view of revealing a more or less favourable attitude towards the strains of modern teaching.*

Keywords: *modern information and communication technologies, interactive teaching strategies, motivational sphere/domain, learning motivation, interest-attitude.*

INTRODUCTION

In specialized literature, the approach on training according to the constructivist patterns meets, especially lately, significant criticism from the followers of behaviourism. Constructivism brings forth mental operations, stressing on the individual processing of information in solving problems or a socio-cognitive conflict. In

building up knowledge, the basis for learning is the understanding and solving of the socio-cognitive conflict, by identification, analysis, processing, interpretation, argumentation.

The presentation of constructivist ideas, shaped within the theory and practice of trening, turns out viable only if the student learning to become an educator is formed to this spirit. Studies such as those of Anderson (2000) analyse the attitude of teachers towards constructivism; they feel frustrated because this paradigm stresses on the central role of the student, while the educator only has a role in creating the educational context. In the transition from behaviourism to constructivism, the teacher notices changes such as centering on large objectives, that is on the operational objectives of the teaching activity; planning will be made starting from competencies needed in order to educate students; the organization of trening will be achieved by combining interactive forms with the individual and frontal ones. The educational activity is regarded as an oscilatory movement from behaviourism to constructivism, a „syndrom of the balance" defining, in the opinion of more pedagogists, the transition from educator-centered means of action (from the transmitter to the manager, mediator) to those student-centered (from the role of receptor, immitator, to that of main agent of knowledge).

Constructivism presumes a change in the teaching-learning-evaluation relation, from informative to formative, from authority to liberty, passing from the classical guidance of learning to the management of knowledge in the constructivist orientation. The process of teaching is replaced with those of facilitating, counseling, guiding learning (more learning – less teaching); from training and educating to learning (from education to learning); from the didactics of instruction to that of building up knowledge; from the culture of transmitting to that of learning; from training to assisting learning.

In the educational theory and practice in Romania, the two paradigms, although inter-dependent, have not found a favourable soil for explicit implementation, being still very powerfully overshadowed by the behaviourist paradigm. Constructivist principles and models have been disseminated once with the implementation of the new curriculum, but without a clear conceptual differentiation, and more like a sum of theoretical and practical suggestions.

In order to perform this investigation, we consider as necessary to define the working concepts.

Student centered instructive – educational approach

Centering on the student is a fundamental attribute of educational paradigms that structure their steps depending on certain characteristics of the student-process relation and/or of the student/contents relation, as opposed to the traditional teacher-centered paradigms. We derive from the specialized literature the follow-

ing general characteristics: a) active participation of students in building up their own knowledge; b) students build up knowledge based upon their own knowledge and skills; c) they understand expectations and are encouraged to use progress self-evaluations; d) they work in collaboration; e) they decide on the componence of groups and working methods; f) the students monitor themselves their own learning course, in order to understand how knowledge builds up and to develop learning strategies; g) students have an intrinsic motivation for reaching the goals they have set; h) activity represents a true learning process; i) learning is an active search for the meaning; j) teachers acknowledge the existence of different learning styles; k) teachers help students to surpass difficulties, by formulating questions and orienting them to the right solution.

Modern information and communication technologies

The development of modern technologies opens new dimensions to the achievement of the educational activity – combining traditional strategies with modern ones (multimedia, educational software, distance courses through radio, television, internet, e-learning, virtual learning classes).

From a theoretical point of view, research carried on in the field of training and based upon electronic means of information and communication concludes that using the computer is to be done only under the behaviourist pattern promoted by Skinner. According to this model, control over what is to be learned and how to learn is totally held by the teacher. Today, the model is out-dated, and the significant aspect is how technology is employed. Martin Weller, Professor in Educational Technology at "The Institute of Educational Technology -The Open University in Great Britain indicates different teaching models that have introduced efficient teaching strategies for the instruction in Electronics, such as: constructivism, resources based learning, collaboration based learning, learning based on problems and learning by project, where the trainer's role balances between a coordinator and a superviser. Yet a practical analysis of the e-Learning systems has shown that the main functions of an electronic platform of training are limited to certain components of the resources based learning and collaboration based training. Besides the current meaning, of informational and communication technologies, electronic learning comprises some characteristics: electronic (or virtual) lectures, informal education, combined training systems, training communities, management of knowledge, network training, through and for labour. Irrespective of how learning is organized, the electronic training systems integrate different training structures, that we are not going to detail, because they are the objective for analysis of other specialized papers dealing with: knowledge based systems; database search technologies; information and communication technologies; expert systems/artificial intelligence; database technologies.

Interactive teaching strategies

The teaching strategy previews the most logical and efficient methodical course that is about to be followed in approaching a chain of educational circumstances. We intend this way to put forward to the student some instructive-educational tasks that imply using methods, procedures, means and forms of organizing, building up interactions and relationships to make possible the acquirement of knowledge and development of qualitatively superior competencies. Starting out from this aspect, it is necessary that the teaching strategies followed some quality standards:

To be scientifically consistent, that is to ensure conditions for understanding and interpreting science, for cognitive development, socio-affective interaction, stimulating the attitude-behavioural development;

- To be integrative: they achieve correlations between knowledge, abilities, values and beliefs, of attitudes with concrete actions, promoting cross-curricular learning;
- To be student-centered: this is an active source, the student becomes the teacher's partner;
- To be value-centered: students' performances will materialize into making decisions based on values and relating these decisions with the social reality;
- To be active-participative: they follow the development of some cognitive systems base upon stimulating reflexive thinking, with the involvement of students in real life situations and employing knowledge and abilities they acquire into various contextes.

In the constructivist vision, the teaching process is not carried on at chance, but presumes the application of a succession of strategies, needs a strategical approach thatshould make possible the successful achievement of instruction circumstances, with economies of effort and maximum effects. Thus, strategy becomes a "working plan" of the teacher with the students, implies "adopting a directing line of action", in order to efficiently solve a teaching circumstance.

Motivation for learning

Most of the researchers see motivation as a sum of psychological heteroenous and dynamic factors that determine an individual's conduct and activity. According to R. H. Dave and H. Lowe, motivation is a condition and an indispensable premise for learning all life long. The motivation for learning is a psychological structure that consists of a series of triggers that permanently change and interact (needs, meaning of learning, reasons, purposes, emotions, interests).

The motivation for learning is a general notion that includes processes, methods and means that determine the personality's productive cognitive activity, the active acquiring of educational contents. It allows personality to establish not only the direction, but also the methods to achieve the various types of learning, to use along this process the affective-volitive sphere of the personality. At the same time, it can be the effect of the learning activity. Getting to know the results of this activity, the satisfaction to have learned and satisfaction during learning support the trainee's efforts to learn. As a factor that orientates the students' behaviour and stimulates it towards an intense activity, motivation is expressed under the shape of interests and attitudes. These have a decisive influence in determining the direction and intensity of learning. Psychological research have proved there is a strong interdependence between attitudes and interests, on one hand, and school success on the other. Interest represents a strong motivational factor and support to learning, generates a positive attitude towards it and contributes to improving the quality of learning.

Cognitive and motivational attitude

The motivation for learning in adult ages represents a generalizing notion that includes relatively steady psychological formations (interest-attitude) and current needs of the personality (performance/success). It is a psycho-pedagogical and social-economic process achieved at the interface with the personality's sub-identities (the professional, social-civil, parental, marital ones), with the work and learning activities, the habitual and actual dimensions of motivation. The development of motivation for learning within the training process is achieved by ensuring the positive dynamics of interest-attitude and performance/success.

We identify in the specialized literature two reasons/interests for the learning activity. The first involves an impulse towards expansion and development, the seacrh for self-accomplishment and power, of self-fulfillment and perpetuation. The second views a selection of purposes, following the motivation emerging from anxiety and uncertainty. The motivational background of learning in adult ages is determined by the "pros" in favour of a reason or another. The tendency towards performance and self-development characterize development in adult ages and determine the motivation for learning.

The analysis of the literature treating on motivation indicates a certain convergency of the scholars' opinions over the systemical structure of the motivation for learning, characterized by *a direction, constancy and dynamism* and the diversity ofr opinions regarding the structural components of the motivation for learning. In the motivational sphere of the learning subject we include *purposes, emotions, capacity of learning, reasons*. J.R. Kidd insists upon

the determining role of *interests* and *attitudes* in the motivational structure of adults, examined in relation to the learning activity.

More researchers point out to *interest* and *attitude* as motivational formations that are present in the structure of the motivation for learning and prone to help in lifelong learning. A synthetical notion, *interest – attitude* is a motivational orientation that reflects the individual's *availability* to perform the activity that raises his interest, gives satisfaction following the discovery of what is new, unknown. Being placed in the scale of positive values, interest-attitude undoubtedly has educational valences, stimulating (motivating) the process of acquiring competencies. On the level of consciousness, trainees build up positive nuclei, behavioural patterns that they will tend to accomplish or update, based on the previous achievements.

METHODOLOGY

Purpose:

The purpose of this investigation is to determine the motivational-cognitive potential of students, in order to achieve a modern teaching approach, based on modern information and communication technologies and interactive teaching strategies.

Objectives:

The Objectives of the Investigation is to determine the motivational-cognitive potential of students; the analysis of the motivational-cognitive potential of the subjects has been performed from the point of view of revealing a more or less favourable attitude towards the strains of modern teaching.

Hypothesis:

Achieving a student-centered teaching activity by employing interactive teaching strategies and modern communication and information technology will determine the improvement of the cognitive-emotional attitude towards the teaching activity.

Pannel of subjects:

As to achieve the proposed objectives, we have paid attention to 171 students from Faculty of Educational Scienties, University of Pitesti, 46 students from first year of study, 64 students from second year and 61 student from thirty year of study.

The Methodology of the Investigation

As to achieve the study we have employed the questionnaire based inquiry, using as a tool the creative motivation questionnaire, elaborated by Paul Popescu Neveanu, a questionnaire that evaluates positive attitudes that are favourable to a constructive-creative activity.

RESULTS

The results analysis, processing and interpretation.

a) The results of the initial evaluation of interest – attitude

As to elaborate the main indicators that we employed in elaborating the initial evaluation questionnaire on interest-attitude, we have combined the characteristics of interest: contents, purpose, type and level of attitude stability (Ion Neacșu): direction, intensity (force), focus, emergence, coherence, consistence and specificity. As the questionnaire has an ascertaining character, we have evaluated: 1. the level of stability/direction; 2. type of interest-attitude.

Within the results obtained applying the questionnaire we have gathered the following data characterising the trainee's interest – attitude towards learning at the beginning of the seminar: 62,83% of them have a high level of stability in interest – attitude; 24,91% of them – a moderate level; 12,26% – a low level.

b) Summary of the final evaluation of interest-attitude

Success and performance recorded in relation to a standard that, hypothetically, may positively influence the dynamics of interest-attitude towards learning is expressed on the personality level by the state of satisfaction or dissatisfaction. Therefore, the evaluation scale of the satisfaction-dissatisfaction level is directly proportional with the interest-attitude measurement scale. If, at the end of the training programme, the trainee's state of satisfaction is high or average, the dynamics of interest-attitude is positive. The results of the final questioning prove a positive dynamics of the trainee's interest-attitude towards learning, subsequent to applying training programmes based upon professional performance standards (76,98 % – high level of satisfaction, 12,64% – average level of satisfaction).

Correlating the data of the initial and final questioning we have obtained the following results: increase of the interest-attitude with 10,15% and diminution of the dissatisfaction level with approximately 3%.The analysis of items shows that:

- the largest part of the students is externally motivated (34,8 %); the motivation source is outside them or the activity they are carrying on. In this case, learning appears attractive because of its consequences.
- 25,5 % of the respondents are intrinsically motivated. They perceive curiosity, meaning the need to know, as a reason for learning.
- 20,5 % of the respondents are both intrinsically and externally motivated. They feel the need to know and advance professionally.

From the perspective of the erasons for learning, the following proportion is relevant: 10,6 % of them learn in order to cope with the rapid changes that we face. What matters most is *how they learn*, and not *what they learn*. Motivating teaching strategies are those that lead to shaping orientation abilities, thinking and creativity, flexibility of cognitive and attitude related structures, most of the students appreciating in a positive way the employment of interactive teaching strategies and of modern communication and information technologies.

On the open answer item *"Indicate a reason for learning at your age"*, we have obtained the following results: 55,3 % of the subjects connect the erasons for learning in adult ages from their professional activity; 25,5% – of knowledge in itself; 10,6% – of adjustment to changes.

Among the social–economic and normative-institutional factors that influence the motivation for learning at adult ages we find: organizational needs and interests, employers' needs and interests; professional standards, types of lectures and their certification; means of achieving formative activities, by IT&C integration. Claiming reasons for professional development and improvement, they prefer group activities/seminar activities to other types of instruction, because the personalization of the teaching course becomes possible and with using interactive teaching strategies their applicative abilities are put into light. Being required to list the advantages of performing activities with IT&C use, most of the students state their formative value, of complementarity and compensation with classical teaching meeans; the majority affirms their employment develops activism and involvement, developing their interest towards the activity.

CONCLUSIONS

The motivation for learning forms all life long, in the virtue of the laws of personal development, of the ontological stages and psycho-social processes of shaping the reasons for human activities, including the activity of learning. The structure of the motivation in pedagogical circumstances includes at the same time updated factors and latent ones (interest-atitude, as a psychological formation and performance/success/competitivity as actual needs of the personality).

The motivation for learning is a psycho-pedagogical and social-economic process taking place on the level of interference between one's personality sub-identities (the professional, social-civic, parental, marital ones), of the working and learning activities, of the habitual and actual dimensions of the personal motivation.

The shaping of the motivation for learning does not express itself simply by developing a positive atitude and the aggravation of the negative attitude towards learning, but by the evolution of the complexity of the motivational sphere, of the triggering factors in creating this sphere and by creating new, more complicated, sometimes contradictory relationships.

- ⚜ Maintaining and improving performance is the most frequent reason for learning, affirmed by the students.
- ⚜ The motivation for learning is weaker than the motivation for working and playing and must be stimulated by developing in the adults the interest and capacity of lifelong learning, by exploring the affective facet of the learning process and the applicative characteristic of the learning results.

Teaching that is based on modern information and communication technologies and on employing interactive teaching strategies conditions the practical and theoretical behaviour of an individual. They are the expression of the individual's needs, socially determined and acting in the direction of shaping *the interest for learning and the positive attitude towards teaching.*

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AXIOLOGICAL DIMENSIONS IN THE TEENAGERS' BEHAVIOUR

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Abstract. *By their system of values, norms and rules, moral and ethics command and recommend the human behaviour. The moral behaviour of teenagers being marked by hedonism, relativism and autonomy, the criteria of „good" and „evil" reduce, most of the times, to what is good or evil for each individual; „if it's good for me, no one has the right to prevent me from what I want to do". The objective of this paper ist o identify a succession of stages in interiorising the system of values governing the teenagers' behaviour. The starting hypothesis presumes that during adolescence, the moral behaviour is autonomous, without exterior constraints, but observing moral rules maintains a relative, situational dimension. The subjects in the study are high school students, aged between 15 and 19 years old and the tools employed are a series of situational items presenting concrete circumstances, with implications on the teenagers' school behaviour. The conclusions of our study reflect the significant fact that moral experience, expressed in the chronological age and residential environment represent a primordial variable in determining moral autonomy, but also that there is a large number of teenagers observing moral rules out of fear of punishment or by use of a moral habit.*

Keywords: *moral phenomenon, moral crises, moral autonomy, moral development, moral norms*

INTRODUCTION

An individual's personality cannot leave aside the morality, because it mediates to the human being the transposition, on an individual level, of the values and principles of general ethics. Thus, one's conduct finds a direction and a humanly profoud significance, as long as moral shapes and orders the biological manifestations, tempers them, putting them to a large extend under the sign of permissions or interdictions.

While crossing an age when their life experience is insufficient, comparing to their intellectual possibilities, teenagers often put forward false judgements of value. They rely on some hasty reasoning, made by generalising particular or even singular known cases. This reasoning may build up as a frame of beliefs that infuse into their personality and, as motivational structures, can direct one teenager towards less socially and individually desirable or dangerous acts.

Adolescence, the romantic age of self-discovery, „the second birth", as Rousseau named it, represents the favourable moment of defining one's moral personality. Dominated by inner anxieties, by impetus and aspiration towards higher ideals, eager to find out the misteries of this world and the meanings of life, the teenager wittingly takes over from his socio-cultural environment the behavioural patterns that will lead him all life long.

The teenager wants himself equal with the adults, although the adults world is subject to the teenage criticism. That's why he will tend to surpass, by transformation, the world that doesn't satisfy him and will take upon himself „the main role in redeeming the world" (he sees himself as a demiurge of a new world). That is why the teenagers' system or plans for life are at the same time full of generous feelings, selfless projects or mystical fervour, but also of a stirring megalomania and consciencious egocentrism.

At this age, the interiorization of moral values has an ascending dynamics that is worth being approached from a psychological, but as well educational point of view.

Because of the development of formal thinking, the teenager can operate, at a moral level, with various moral values implied by the social ideal, life's ideal and the moral one.

Wishing to integrate into society, according to one's life ideal, the teenager is subject to strong disagreements that lead to ever repeated, strong *moral crises.* These crises have a variable intensity and are related to the adjustment to new social statuses and roles. Little by little yet, acquiring life experience, a tendency towards reconciliation with the environment takes shape, by adopting the values and norms of the adults world.

The interiorization of moral norms and rules presumes the existence of a personal set of values, as well as the means to understand morality, both regarding major issues, and smaller problems. The specific behaviour might last in time much longer than the concrete situation requires it, because the individual has adopted it for himself, turning it into a part of his inner system of values.

The process of interiorization of moral values is a subjective one, being very hard to descipher the true reasons of a teenagers' moral manifestation. From this point of view, students may become aware of the contents of moral notions, but not necessarily they will act according to it. A series of moral elusive acts, habitual in the school environment (as truancy, prompting, copying etc) prove that many

students may have the theoretical knowledge of duty and moral responsibility, still without interiorizing affectively the need to concretely respond to the moral requierements and exigencies.

On the other hand, as J. Piaget affirms, the „official" morality may condemn what seems to the student to be the „true" morality. For instance, prompting to help a fellow student may also signify a form of solidarity with the others. Before reaching a moral autonomy, the teenager crosses a period of moral heteronimy, that is of obedience, submission to the external ethical norms. Shaping some transcendal commandments having another value of autorithy and demanding a certain behaviour may represent an operative way to adjust one's conduct in a given circumstance.

In what concerns the study of the moral phenomenon during adolescence, we have started from the ideas of M. Ralea, considering them revealing, that the moral act is never a direct and automatic one; that the involvement of the affective-motivational component and the presence of more obligations complicates the moral decision and that without a moral conflict there cannot be moral development.

The specificity of the moral behaviour can be explained just by socio-cultural factors ordering of individual native predispositions. Moral autonomy, and not moral conformity ultimately define one's moral personality.

The continuer of Piaget's work in the researching field of the moral judgement development, L. Kohlberg achieved a detailed description of *moral autonomy*. He notices that moral development, expressed by the capacity to judge what is right and what is wrong, structures itself gradually, in a constant order and depends more on the child's level of cognitive development than on his socio-cultural experience. The passing from a level to another implies a cognitive reorganisation, an irreversible leap.

As to identify the levels and stages of moral development we have suggested a few landmarks (punishment, benefit, position in the group, duty towards the rule, civical commitment and one's own consciousness) and the possible questions identifying the motivation for behaviour („what will happen tom e?", „what will I get?", „what will they say?", „what does the law say?", „what should be?" and „what do I think/believe?").

METHODOLOGY

Hypothesis

Starting from the assertion that personality is what allows us to anticipate an individual's reactions in a given context and that, in order to understand the moral phenomenon we need to know as well the behaviour that is adequate to a given circumstance, *we have presumed that during adolescence, the moral behaviour is*

autonomous, freed from external constraints, but observing the moral norms still keeps a relative, situational dimension.

Pannel of subjects

The subjects of our study were teenagers – high school students, of ages between 15 and 19 years old – and have been established by means of *the stratified sampling.* As to establish the final sample, we have classified the reference population according to the relevant criteria making up the object of our work (chronological age, sex and residential environment) and then, by means of the simple random sampling procedure we have established the final sample.

The Methodology of the Investigation

Taking into consideration all these reasons/arguments we have built up a situational questionnaire that investigates the teenagers' moral attitudes concerning obedience towards discipline norms. Each item offers five answering possibilities regarding: fear for punishment, respect (fear from) towards adults or colleagues, moral duty either as practice and moral habituation, or a the refuse to observe moral rules, moral non-conformity, as an expression of moral autonomy.

The items of the questionnaire can detect, by means of situations as closest possible to the real ones that the teenager students confront with, the ways to observe school rules and norms (observing the school regulation and punctuality). They offer the possibility of expressing a series of attitudes which are specific to the teenagers' behaviour in problematic circumstances during their daily activity (attitude towards school truancy, towards smoking, attitude towards parents and teachers).

RESULTS

The proportional distribution of responses reveals that almost half of the teenagers (40,8%) manifest moral autonomy, in the sense of obeying school norms, which proves their interiorization. They think they should do everything they are asked for in school, because this way they may obtain success in their activity.

A percentage of 28,4% obey school regulation as an external requirement for the normal course of activity in school („this is required"), without showing an inner attachment to obey these norms. Most of the times they may break rules without having the feeling of guilt. A proportion of 14,5% of the students think that in school, one should do everything is required, in order to be considered a „good", „obediant", „hard-working" etc. student, attributes that matter, to a great extend, in defining a teenager's self image.

A very small percentage (6,7%) is made up by students that obey the school regulation in order not to be punished, which shows an interior level of moral be-

haviour, lack of moral autonomy and of interiorization) of moral norms and rules. For this type of teenagers, punishment, most of the times as a recording of their absences or diminution of the conduct grade, becomes the sole reason for them to observe the requirements of school regulation. Very often they are more willing to be sanctioned than to obey school rules.

The negative aspect of the moral autonomy shows in the case of those affirming that in school „everyone should be left alone to do what he wants to", a fact that proves nevertheless the absence of interiorization of behavioural norms. We consider that the high enough ratio of 9,7% proves as well an age specific non-conformity.

In what concerns the other dimension of the study, 47,2% of the students motivate punctuality as a moral duty, which highlights a raised level of interiorising this behavioural norm. These teenagers consider that being punctual means showing interest towards school activity, their main preoccupation at this age.

Still, many enough of them (19,8%) are punctual just for not receiving sanctions for truancy. In case they are not immediately punished for being late, they do not show any preoccupation for punctuality, which proves the dependence of their moral behaviour from an exterior motivation.

Respect towards school authority, represented by the teacher, is proven in only 17,7% of the teenagers, that believe they do everything possible to be punctual, because "they feel ashamed by the teacher to be late". These ones, as well as those who are not late in order not to be punished (37,5%) live a feeling of guilt only in relation to elements exterior to moral norms (absence of sanctions and presence of a teacher they respect, for one reason or another). They might inevitably fall into non-obedience of the school regulation, that specifically requires students to be punctual at classes.

The smallest part of the youngsters (12,1%) are punctual because "that is what the school rule asks" and, as any implicitly understood regulation, it must be obeyed. We consider this understanding as superior to the previous ones and very much close to the moral autonomy when the individual acts by his own belief. There is a possibility that these youngsters might pass to the upper level of moral autonomy, but they might as well remain all along their existence to this level (many mature persons state that a law should be observed for the normal course of things, even if the law isn't favourable to everybody).

We also notice that 3,2% of them show non-conformity regarding punctuality. They think that being punctual does nothing else but complicate the course of the other activities. We may explain this motivation by the well-known teenagers' tendency to not comply to rules, mostly when they do not satisfy major interests (although some of the students proved non-conformity in this concrete circumstance, we must point out that the proportion of those being intentionally late is much smaller).

CONCLUSIONS

Our study has shown first of all that the level of moral judgement in teenagers is higher than the level of behaviour, to the sense that although he knows what's the right way to react, the individual acts differently, being influenced by moods, previous behaviour, feelings etc. It is frequently noticed that circumstances when teenagers know very well what is "allowed" and what is "not allowed", "what is right" and "what is wrong", their conduct is still not according with what they know. Such a disagreement usually produces because, during their assimilation, moral notions have not been associated with feelings, emotions, in order to truly become dynamical sources of a moral behaviour. The percentage of those who do not observe moral norms, by one reason or another, is very small comparing to those who state that moral norms should be observed.

Yet, noticing the teenagers' behaviour, we have concluded that much more cases of non-obedience of moral norms than their answers, somehow theoretical, to the items of the questionnaire. Nevertheless, it is certain that at this age, young people can make the difference between what is right and what is wrong, but not every time their mindset coincides with the personal well being and that is why their behaviour may be a different one.

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COMPARISON OF PERSONALITY CHARACTERISTICS IN ADOLESCENCE AND EMERGING ADULTHOOD

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Abstract. *The aim of the study was to outline the personality markers of two developmental periods – adolescence and emerging adulthood (Arnett, 2006). Participants were 169 adolescents, aged 15 to 18 and 242 emerging adults, and aged 18 to 25. Bulgarian adaptation of Myers-Briggs Type Indicator (MBTI), form G, was applied. The results indicated the presence of a certain developmental pattern, subordinate to the principal of maturity (Blonigen et al., 2008; Vaidya et al., 2008). The older subjects proved to be more introverted (I) (I=1.43; p<0.01) and more judging (J) (J=1.39; p<0.01), than the younger ones. Their modal psychological type ISTJ was characterized by a need of order, control and respect for traditions. It was in contrast with the four adolescents' dominant types, which common feature is the combination EP. It presupposes a taste for active life full of strong experiences, openness to new opportunities, flexible and adaptive way of life. The personality specificity in accordance with "gender" variable was also traced out. Significant differences between female personality profiles of the two studied age groups occurred, repeating in broad outlines the tendency found in the whole studied contingent. Surprisingly the comparison between males in adolescence and emerging adulthood did not show any significant type differences.*

Keywords: adolescence, emerging adulthood, psychological type, gender differences, developmental pattern, increasing maturity.

INTRODUCTION

Social, economic, and demographic changes over the past half-century have resulted in dramatic changes in what occurs during the late teens and early-to-mid-twenties for most people in industrialized countries (Arnett, 2006). It

is no longer normative for the late teens and early twenties to be a period of intensive preparation for imminent entry into adult roles. The new norm is that these are years of experimentation and exploration of a variety of life possibilities, as enduring decisions are delayed for many young people into the mid-to-late twenties(Arnett et al., 2001). The phenomenon of Emerging Adulthood is common across industrialized societies. It is also more prominent in some sections than others, especially those where the postponement of adulthood makes sense in terms of educational and occupational careers and where societal pressures are not heavily in the opposite direction (Bynner, 2005). Arnett (2006) defines emerging adulthood as a period of development bridging adolescence and young adulthood during which people are no longer adolescents but have not yet attained full adult status. This period ranges from the late teens through the twenties, with a focus on ages eighteen through twenty-five, and is characterized by frequent change as young people explore various possibilities in love, work, and worldviews.

The age period from 10 to 25, described as "youth" is too long and is accompanied with too many changes for one term to describe it adequately. It makes sense to portray it as two periods, adolescence and emerging adulthood. Adolescence is generally viewed as a transitional stage of development between childhood and adulthood, which begins with the onset of puberty around the age of 12 years and continues into young adulthood. It is supposed to be a time to find and refine one's identity (Bynner, 2005). Research has shown that identity achievement rarely occurs by the end of high school (Montemayor, Brown, & Adams, 1985, cit. by Nelson et al., 2004). For most, identity development continues through the late teens and the twenties (Valde, 1996; Whitbourne & Tesch, 1985, cit. by Nelson et al., 2004).

Emerging adulthood is a complex and dynamic period of life that presents young people both numerous opportunities and a variety of challenges. It may best be characterized as a time during which people are pursuing individualistic oriented rather than other-oriented goals, are striving to form an identity through experimenting with work, relationships, and worldviews, lack specific transitional roles that prepare them for adult roles, are entering into increasingly intimate, non-marital relationships, and are engaging in relatively high rates of risky behaviours such as unprotected intercourse, illegal drug use, and driving while drunk (Arnett, 2000, cit. by Cheah & Nelson, 2004; Facio & Micocci, 2003). In longitudinal studies personality changes in the period of emerging adulthood are interpreted as a pattern of increasing maturity and assumed as a normative trend toward growth and maturity during the transition into adulthood (Blonigen et al., 2008; Vaidya et al., 2008). Such evidence could be found in many other investigations that have used different scientific approaches. So it is now well established in the paradigm of psychological

type (Jung, Myers and Briggs) that younger groups more often reported higher percentage of Extraversion and Perceiving than did comparable older groups (Myers et al., 1998).

Researchers have cautioned that emerging adulthood may not be a universal period, but rather varying widely according to cultural values and beliefs (Cheah & Nelson, 2004). The present study is a trial to verify the existence of this phenomenon in Bulgaria. Its **aim is to outline the personality markers of the two developmental periods – adolescence and emerging adulthood** in the light of Jung's theory of Psychological Types, developed and refined by Isabel Briggs-Myers and her mother Katharine C. Briggs.

Hypotheses:

- There are significant differences between psychological profiles of the studied groups, reflecting increased maturity in emerging adulthood (Blonigen et al., 2008; Vaidya et al., 2008).

- There are gender differences in the personality characteristics between examined subjects, repeating in broad outlines the tendency, found in the whole contingent.

METHOD

Measure:

Bulgarian adaptation of Myers-Briggs Type Indicator (MBTI), form G, was applied (Pencheva & Kazandjiev, 2001). The instrument identifies four basic preferences – attitudes and functions. Attitudes are the pairs Extraversion (E) / Introversion (I), that reflect the opposite direction of the attention and Judging (J) / Perceiving (P), that determine the style of life. Functions are also presented by two pairs: Sensing (S) / Intuition (I) are the opposite ways of collecting information and Thinking (T) / Feeling (F) are the polar ways of making decisions (Pencheva, 2006, Myers et al., 1998). Combinations of these preferences are presented in a four-lettered formula and represent the 16 psychological types.

Sample

Participants were *169 adolescents*, aged 15 to 18 (128 females and 41 males), and *242 emerging adults*, aged 18 to 25 (148 females and 86 males).

Procedures

The study was carried out in 2008 -2009 in Bulgaria. The participants were assessed individually or in groups.

RESULTS AND DISCUSSION

Statistical processing of data was realized by using the original program SRTT (Self-Selection Ratio Type Table), product of CAPT (Center for Applications of Psychological Type). "I" refers to the index or ratio, known as self-selection index or index of attractiveness. It can be computed in either of two ways: the ratio of the observed frequency to the expected frequency or the percentage of the type in the sample divided by the percentage of the type in the base population. Statistical significance of the ratio is established through χ^2 (Granade & Myers, 1987).

The results showed that **emerging adults** had preference for **Introversion** (I=1.43, p<0.01), while **adolescents** – on the contrary, for **Extraversion** (I=1.35, p<0.01) (Figure 1).
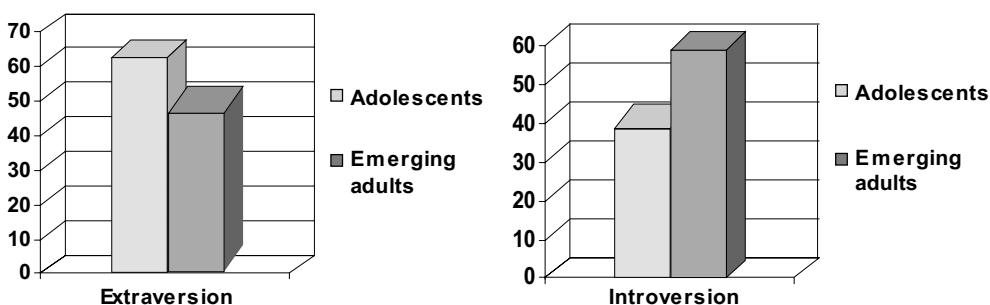
FIGURE 1. COMPARISON BETWEEN THE TWO GROUPS ON INTROVERSION AND EXTRAVERSION

According to the results of the study the older subjects proved to be more quiet, stable, thoughtful, calm, cool-headed, and aware of internal guiding principles, philosophy, and commitments. They prefer physical space which allows for privacy and concentration, participate and speak up alter observing and formulating their own impressions and questions. Emerging adults see own self as the primary resource and keep own counsel or seek advice from a few confidants, want to be deliberate about making a decision or trying something (Demarest, 1997). This description totally corresponds to the idea of increasing maturity during the period of emerging adulthood.

On the contrary, adolescents appeared to be more energetic, enthusiastic, sociable, making things happen, involving others, prone to take action. They reach understanding through interaction and discussion, want to talk it through. At this age one seems to prefer physical space which facilitates interaction, sees others as an important resource, seeks input from others (Demarest, 1997).

Emerging adults preferred **Judging** (I=1.41, p<0.001), while **adolescents,** on the contrary – **Perceiving** (I=1.39, p<0.001) (Figure 2).
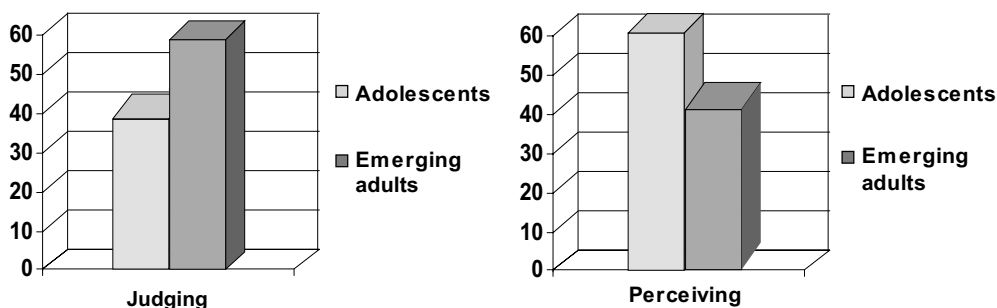
FIGURE 2. COMPARISON BETWEEN THE TWO GROUPS ON JUDGING AND PERCEIVING

Subjects, aged 18-25 can be described as more decisive, serious, dependable, deliberate, conclusive, focused, deciding too quickly, demanding, methodical and systematic. They stick to commitments, plans, and schedules, wanting a plan and may be uncomfortable proceeding without one. Emerging adults develop routine approaches to work, see work and play as distinct aspects of life, work best when there is something definite to work toward, often experience change as disruptive.

Subjects, aged 15-18 are spontaneous, receptive, exploratory, open to new experiences and not wanting to miss out on anything, fun loving, and sometimes having difficulties in deciding, tentative, less organized than others, being „last minute". People with this preference seem less serious, more playful and lighthearted, see work and play as intertwined aspects of life, and want work to be productive, enjoyable and playful. They seek out various perspectives from which to understand people or events and are comfortable not having something definite to work toward.

Significant differences at a level of the whole type distribution were also identified. It occurred that one type (ISTJ) was over-represented in the emerging adults group, while four types (ESTP, ESFP, ENTP, ENFP) were over-represented in the other group.

Emerging adults modal psychological type ISTJ (I =1.91; p<0.01) presupposes a need of order, control and respect for traditions. This is in contrast to the four **adolescents** dominant types, ESTP (I=2.45; p<0.05); ESFP (I= 2.39; p<0.05), ENTP (I=2.02; p<0.05), ENFP (I =1.91; P< 0.05). Each of them has its own characteristic, but their common feature is the **combination EP**, described by a taste for active life full of strong experiences, openness to new opportunities, flexible and adaptive way of life.

The personality specificity in accordance with the "gender" variable supported our expectations only partially. Significant differences between personality profiles of the two studied age groups occurred only in a female sample, repeating

in broad outlines the tendency, found in the whole studied contingent. **Emerging adults females** have preference for **Introversion** (I=1.44, p<0.01), while **adolescent females –** on the contrary, for **Extraversion** (I=1.34, p<0.01). (Figure 3).
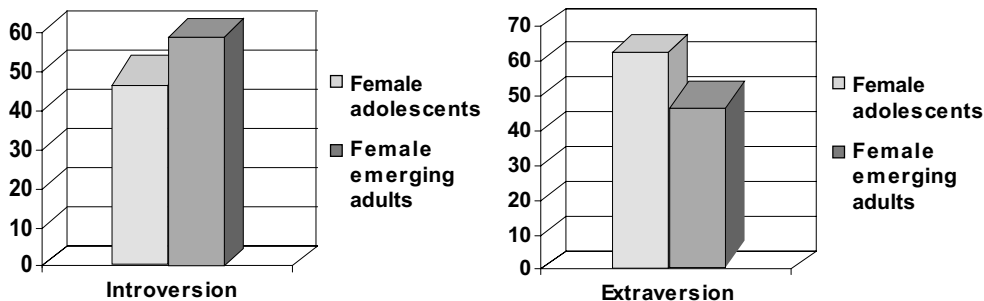
FIGURE 3. COMPARISON BETWEEN FEMALES ON INTROVERSION AND EXTRAVERSION

Emerging adults females prefer **Judging** (I=1.55, p<0.05), while **adolescents females,** on the contrary – **Perceiving** (I=1.49, p<0.05) (Figure 4).
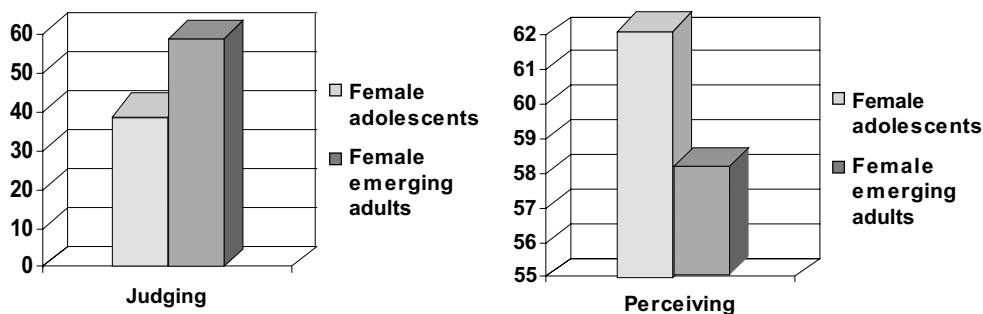
FIGURE 4. COMPARISON BETWEEN FEMALES ON JUDGING AND PERCEIVING

Emerging adults females showed two modal psychological types: ESTJ (I = 2.27; p< 0.05) and ISTJ (I =1.35; p< 0.05). They are too close to each other because they have only one different letter (E/I – respectively for Extraversion/Introversion). Their common characteristic is a need of order, control and respect for traditions. It is in contrast with the two **adolescents females** dominant types, ESTP (I = 6.36; p < 0.01) and ENTP (I = 2.7; p < 0.01) with their common feature – EP, characterized by a taste for active life full of strong experiences, openness to new opportunities, flexible and adaptive way of life.

Surprisingly the comparison between males in adolescence and emerging adulthood did not show any significant type difference.

CONCLUSIONS

There were significant differences between the typological profiles of the two studied groups, which supported the idea that emerging adulthood is a distinct developmental period. Adolescence exhibited more immature profile, while the psychological profile of the older sample showed a tendency towards growth and maturation, which is normative for a personality development.

Increase of Introversion and Judging with age both in the whole contingent and in the female group corresponds to MBTI findings and indicates a systematic developmental tendency (Myers et al., 1998). Although similar to the whole contingent, female sample exhibited a specific developmental pattern. Important differences between the two age periods among males were not observed. It will be useful to broaden the explorations in this direction.

It might be assumed that the phenomenon EMERGING ADULTHOOD exists at a personality level in Bulgarian context. So the present study is in support of the idea that emerging adulthood is a period, which connotes a pattern of growth and maturity, and validates the maturity principle as a normative trend in personality development during the formative transition into adulthood (Blonigen et al., 2008).

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ADOLESCENTS' VIEW OF THE MOST IMPORTANT CONFLICTS

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Abstract. *This paper examines current conflicts of adolescents. The aim of the paper was to investigate how adolescents perceive the most important conflicts in their relationship with peers, friends, romantic partners, teachers, parents and siblings. Conflict was defined as interpersonal disagreement and was distinguished from bulling and aggression. For examining the perception of conflicts, the method of recalled conflict episodes was used. The perception of certain elements of conflicts was researched with the questionnaire on characteristics and impact of conflicts. The research was conducted on the sample of 316 adolescents. The research results show that the majority of conflicts occur in the relationship with parents (35.2%), while the most often areas of conflicts are unfulfilled obligations (20.1%), resource distribution (16.9%) and damaging relationships (16.5%). The statistically important differences are determined with regard to the type of interpersonal relation and perception of the following elements of conflict – importance of other side in the conflict, duration of conflict, and outcome of conflict, affective tone upon conflict and conflict impact. The obtained results show that during the discussion of developmental role of conflict in adolescence, the type of interpersonal relationship involved in the conflict should also be taken into consideration.*

Keywords: *adolescence, perception of conflict, conflict resolution strategies, interpersonal conflicts*

INTRODUCTION

Conflicts are universal and widespread phenomenon in interpersonal relationships. Whenever individuals are in interaction, and especially when interaction is frequent and intense, discords, disapprovals, various kinds of disagreements,

confrontations and arguments – in other word conflicts are inevitable. Some authors believe that existence without conflicts is psychological utopia (Deutsch, 2000; Johnson & Johnson, 1996). Conflicts range from minor disagreements that are easily solved to major disputes that are much more difficult to reconcile, leaving long-lasting effects for the individuals involved. For this reasons, interpersonal conflict is commonly viewed as a negative event. However, the final result of conflict is not necessarily negative. Constructive and destructive consequences of conflict depend on how they are managed (Deutsch, 1973). Conflict also contains potential for constructive changes and can have personal and social value (Deutsch, 1993; Johnson & Johnson, 1996; Tezer & Demir, 2001). An optimum quantity of conflicts in the life of every individual is even necessary since it can lead to balanced and productive functioning and development. Many development psychologists believe that conflict are one of the cornerstones leading to positive changes within individuals, affecting areas such as cognitive, social and psychological development (Johnson & Johnson, 2005; Noakies & Rinaldi, 2006; Sandy & Cochran, 2000).

During adolescence, conflicts are important forms of social exchange since the expansion of social field occurs in this period – the number and variety of social relationships of adolescents are increased, thus leading to increased number of conflicts (Petrović, 2008a). Research results show that interpersonal conflicts appear to be an inevitable part of adolescent's relationships. For example, adolescents report an average of 7.7 conflicts per day (Laursen, 1995), with rate varying according to the relationship type. During one week, adolescents have an average of 95 conflicts, 47 with parents, 22 with siblings, 14 with peers, 7 with romantic partner, 4 with friends, and 1-2 with teachers (Petrović, 2009). It should be emphasised that the registered frequency of conflicts varies depending on the research, in other words on definition of conflict, time intervals within which conflicts are reported (i.e. whether they are registered on daily or on weekly basis) and research methodology. Nevertheless, a number of researches show that conflicts with family members are more often than conflicts in other social relationships (Adams & Laursen, 2001; Furman & Buhrmester, 1982; Laursen, 1993b; Laursen 1998; Montemayor, 1982; Petrović, 2008a). Regarding the conflicts that happen out of family, the most often conflicts occur with peers, while conflicts with best friend, romantic partner and teachers are much less represented (Laursen, 1995; Laursen, 1996; Petrović, 2008b; Petrović, 2009).

However, high rate of conflicts do not tell much about the quality of adolescence relationship. Shantz (1987) distinguished several features of conflict, including incidence and intensity (frequency and affective "heat" of a conflict), the issues (conflict topics), initiation and oppression (behaviour that start a conflict), the resolution (behaviour that conclude a conflict) and the outcome (aftermath of a conflict). These components represent distinct but interrelated features of con-

flict events. An undue focus on only one feature distorts and misrepresents the characteristics and functions of conflict. For this reason, conflict rate or frequency provide only limited insight into the significance of conflict to the individuals and relationships (Laursen & Collins, 1994), as well as of developmental role of conflict in adolescence (Petrović, 2008a).

The aim of this investigation was to examine how adolescents perceive characteristics and impact of the most important conflicts in their relationship with peers, friends, romantic partners, teachers, parents and siblings. The survey was dealing with actual conflicts – conflicts which included adolescents as one of sides in the conflict. The research uses operational definition of conflict that was first suggested by Shantz and later developed by Laursen. These authors define conflict as a form of social exchange between two persons which involves confronted statements and actions (Shantz, 1987; Laursen, 1993a). Such a definition clearly separates conflict from aggression and violent behaviour.

This research is in the context of the research on characteristics and effects of the most frequent conflicts, where it was established that adolescents perceive differently the importance of reasons of conflicts, depending on whether they had conflicts with their peers, teachers or family members. The reasons that lead to conflicts with parents and siblings are the least important for adolescents, while the reasons that lead to conflicts with romantic partners and teachers are the most important. The reasons for conflicts with peers and best friends are assessed as moderately important (Petrović, 2009). As the previous one, this investigation is based on the premise that, beside the conflicts rates, characteristics of adolescent conflict, as well as impact, will differ as a function of the relationships and the closeness of the participants. Differentiation of conflict characteristics and impact is expected as a result of differences in the way relationships are formed and maintained (Petrović, 2009). Closed-field relationship with parents and siblings are not easily disrupted because they are constrained by kinships and norms. On the other sides, open-field relationships with peers are voluntary and more fluid. They are initiated, transformed, and dissolved with greater frequency and ease (Collins & Laursen, 1992).

In this research, the type of interpersonal relationship had the status of independent variable. Characteristic of conflict, such as initiation of conflict, importance of the other side in conflict, conflict resolution strategies, outcome of conflict, affective tone upon conflict, immediate post-conflict interaction, the influence that conflict has on particular interpersonal relationship and duration of conflict had the status of dependant variable. Control variables in the research were characteristics of education (type of school and school success), characteristics of participants' families (family structure) and characteristics of social network of participants (peer social network, friendships, partner relationships).

METHOD

PARTICIPANTS

The research was conducted in four elementary schools (two central and two suburban ones), and three vocational and one general high school in Belgrade. The participation in the research was voluntary. All the adolescents who had the written approval from their parents participated in the research. The research was conducted on the sample of 316 adolescents. The sample included two age groups – 6th grade of elementary school (49.1%) and 2nd grade of secondary school (50.9%). Mean age of participants was 11.9 and 15.9 years of age. Approximately equal number of boys (52.2%) and girls (47.8) participated in the research. All the participants were from two-parent families and had at least one sibling.

Educational level of parents was considerably higher than average – 56.3% of parents with university education, 42.1% with high school education and only 1.6% with elementary school education. Furthermore, school success in the previous year was better than average – 41.1% of the participants had excellent school success, 44.5% very good, 12% good and only 2.5% satisfactory. Regarding peer social network and partner relationships, the following indicators were obtained: (a) majority of participants, 92.1% have three or more peer friends, and 93% have best friend; (b) 31.6% do not have romantic partner, 44.3% have only crush on someone, and 24.1% are in partner relationships.

Research procedure and instruments

In this research, the method of recalled conflict episodes was used for data collection. Different variations of this method are usually used for examining actual, existing conflicts of children and youth (i.e. Laursen & Kaplas, 1995; Montemayor & Hanson, 1985; Murphy & Eisenberg, 1996; Murphy & Eisenberg, 2001; Raffaelli, 1997). In the method of recalled conflict episodes, the participants are asked to remember – recall all the conflicts they had in a certain time period, while the definition of conflicts and timeframe for recalling them differ depending on the researcher. In this paper, the recall request was limited to the *timeframe of one week*, which is considered an optimum timeframe for obtaining valid data on actual conflicts (Petrović, 2009).

The data were gathered with two measuring instruments: CPQ – *Participants Characteristics Questionnaire* and CCQ – *Characteristics of Conflicts Questionnaire* (Petrović, 2008a). With CPQ, socio-demographic data were gathered, as well as the data on family structure and peer social network. CCQ was used for gathering data on the characteristics of the most important conflict. This questionnaire contained 9 closed questions.

The perception of the most important conflict was examined in groups, during regular classes and it lasted an average of one school class. At the beginning, students filled in CPQ. They were then explained what kind of conflicts they would be asked about during the research. Conflict was defined in terms of behavioural opposition as those situations when they objected something that other person has said or done or situations in which other person objected something that they have said or done. In other words, conflict was defined as a situation in which two people argue, or sometimes quarrel about something said or done. After that, the adolescents were asked, having in mind the previous definition of conflict, to remember all the conflicts that had happened during the previous week and single out one conflict topic that they found most important. Their next task was to write down, in the given field of the CCQ, the topic of the most important conflict and answer to the following questions: who they had the conflict with, who started it, how important the other side in the conflict was to them, how they tried to solve the conflict, how the conflict ended, how they felt upon the conflict, what happened with the interaction immediately after the conflict, what was the impact of the conflict to the relationship and how long the conflict lasted.

RESULTS

The most important conflict was singled out by 284, out of 316 adolescent (only 32 participants reported that they had not participated in any conflict during the week before). The given data were reduced for easier analysis. Based on conceptual similarity, the topics of the most important conflict were classified in 9 conflict areas (Petrović, 2008a): *personality choices* (i.e. choice of music, places to go out, fashion styles), *resources distribution* (i.e. the use of computers, telephone, pocket money), *unfulfilled obligation* (i.e. household chores, studying for school), *breaching conventions* (i.e. taking things without asking, being late, breaching rules and fair play in sports), *damaging relationship* (i.e. revealing secrets, disrespecting opinions, avoiding calls), *character traits* (i.e. conceitedness, stubbornness), *injustice* (i.e. getting lower grades than deserved, unjust accusations), *provocation* (i.e. insults, insensitive, offensive jokes) and *health care* (i.e. cigarettes, junk food).

As seen in Table 1, the frequency of the most important conflict is not equally represented in all interpersonal relationships. The majority of conflicts occur in the relationship with parents (35.2%), siblings (27.1%) and peers (21.8%). Furthermore, the representation of the most important conflict varies with regard to conflict areas. The obtained results show that the most often areas of conflicts are unfulfilled obligations (20.07%), resource distribution (16.9%) and damaging relationships (16.55%). There is also a link between the type of interpersonal relationship and conflict area. For example, unfulfilled obligations are, therefore, the most represented conflict area in conflicts with parents (15.5%), resource distribution in

conflicts with siblings (8.8%) and parents (7%), provocation in conflicts with peers (6%) and siblings (5.6%), damaging relationship in conflicts with peers (6.3%) and romantic partner (4.2%) and injustice in conflicts with teachers (2.5%).

TABLE 1. CONFLICT AREAS AND RELATIONSHIP TYPES

		Relationship types						
		Peers	Best friend	Romantic partner	Teachers	Parents	Siblings	**Total**
		f (%)	f (%)	f (%)	f (%)	f (%)	f (%)	**f (%)**
	Personal choices	7 (2.5)		1 (0.4)		11 (3.9)	12 (4.2)	**31 (10.9)**
	Resources distribution	1 (0.4)	2 (0.7)			20 (7.0)	25 (8.8)	**48 (16.9)**
	Unfulfilled obligations	3 (1.1)		2 (0.7)		44 (15.5)	8 (2.8)	**57 (20.1)**
	Breaching conventions	10 (3.5)	5 (1.8)		2 (0.7)	5 (1.8)	9 (3.2)	31 (10.9)
Conflict areas	Damaging relationships	18 (6.3)	9 (3.2)	12 (4.2)		6 (2.1)	2 (0.7)	**47 (16.5)**
	Character traits	2 (0.7)	2 (0.7)	1 (0.4)		1 (0.4)	5 (1.8)	**11 (3.9)**
	Injustice	1 (0.4)			7 (2.5)	4 (1.4)		12 (4.2)
	Provocations	17 (6.0)		1 (0.4)		4 (1.4)	16 (5.6)	**38 (13.4)**
	Health care	3 (1.1)	1 (0.4)			5 (1.8)		9 (3.2)
	Total	62 (21.8)	19 (6.7)	17 (6.0)	9 (3.2)	100 (35.2)	77 (27.1)	284 (100)

Conflict initiation. One of the important characteristics of conflict is perception of own contribution and other side's contribution to conflict onset. This characteristic is important for two reasons. Firstly, in some cases, this initial phase of conflict goes unnoticed by conflict participants and they often find themselves «in the middle of the battlefield», unaware how the conflict started and who started

it. Secondly, participants of a conflict often believe that the other side initiated the conflict and that they were involved in the conflict against their free will. This research shows that there is no correlation between the type of interpersonal relationship and perception of conflict initiation ($\chi 2$ (10) =15.82, p = 0.105)[1]. In all the researched relationships, adolescents mainly state that other side has initiated conflict.

Importance of other side in the conflict is related to the value that a person in conflict attributes to the other side in conflict. When the other side in conflict is assessed as important, their opinions, positions, wishes and needs are often more respected than when they are assessed as unimportant. This research distinguishes four levels of importance of other side in the conflict (see Table 2). The obtained results show that the assessment of importance of other side in conflict is related to the person the participant is in conflict with ($\chi 2$ (15) = 92.71, p < 0.001). In the conflict context, parents and siblings are assessed as more important partners in conflict than peers and teachers.

TABLE 2. IMPORTANCE OF OTHER SIDE IN CONFLICT AND RELATIONSHIP TYPES

		Importance of other side in conflict				
		Very important	Important	Unimportant	Very unimportant	**Total**
		f	f	f	f	**f**
Relationship types	peers	9	26	16	11	**62**
	friend	11	6	2	0	**19**
	romantic partner	10	5	1	1	**17**
	teachers	0	1	5	3	**9**
	parents	68	24	2	6	**100**
	siblings	54	14	6	3	**77**
Total		70	104	90	20	284

Conflict resolution strategies represent behaviour of sides in conflict that leads to its end. Although there are a number of possible strategies, they are usually reduced to smaller number of basic categories. This research examines to what extent the participants use the following conflict resolution strategies in various types of interpersonal relationships: (1) *competition* – use of power to fulfil own requests and insisting on own wishes (needs); (2) *accommodation* – easy acceptance of other side's requests and respect of wishes (needs) of other side; (3) *compromise* – partially giving in and abandoning own requests and wishes (needs),

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[1]   Tables will show only results with statistically significant differences.

simultaneously asking from other side to do the same; (4) *resolution* – negotiation with other side in order to reach optimum solution, i.e. mutual fulfilment of wishes and needs; (5) *disengagement* – interrupting conversation, changing the topic, ignoring wishes and requests of other side, while ignoring own wishes and needs; (6) *mediation* – asking help for resolving conflict from third, neutral party. It has been assessed that there is no statistically significant connection between the type of interpersonal relationship and strategies used for conflict resolution ($\chi2$ (25) =37.12, p=0.056). Adolescents use competition as the most often conflict resolution strategy, regardless of the type of interpersonal relationship.

Conflict outcome is the level at which conflict resolution provides equality of conflict participants. The research distinguishes the following outcomes of conflict: (1) *win for participant* (he/she fulfilled initial goals and the other side did not); (2) *loss for participant* (other side in the conflict fulfilled initial goals and the participant did not); (3) *compromise* (both sides reached similar level of fulfilment of their initial goals); (4) *mutual win* (both sides fulfilled all their initial goals); (5) *mutual loss* (nether side fulfilled their original goals). It has been assessed that there is statistically significant connection between the type of interpersonal relationship and conflict outcome ($\chi2$ (20) = 45.45, p < 0.001). In conflicts with peers, adolescents more often end up as winners and in conflicts with parents as losers.

TABLE 3. CONFLICT OUTCOME AND RELATIONSHIP TYPES

		Conflict outcome					
		Win	Loss	Compromise	Mutual win	Mutual loss	**Total**
		f	f	f	f	f	**f**
Relationship types	peers	17	6	13	9	17	**62**
	friend	2	3	3	4	7	**19**
	romantic partner	2	2	3	5	5	**17**
	teachers	2	6	1	0	0	9
	parents	15	24	36	12	13	**100**
	siblings	18	9	18	10	22	**77**
Total		56	50	74	40	64	284

Affective tone upon conflict tells about pleasant or unpleasant experience related to the conflict once it is finished. This research distinguishes four modalities of feeling upon conflict: *very unpleasant*, *unpleasant*, *pleasant*, and *very pleasant*. The obtained results show that there is statistically significant connection between affective tone upon conflict and relationship types ($\chi2$ (15) =30.53, p < 0.01). It was found that conflicts with parents are more unpleasant than conflicts with peers and siblings (see Table 4).

Post-conflict interaction points to the immediate effect of conflict, i.e. what happens with the interaction between conflict participants immediately after the conflict is finished. This research reveals two basic immediate effects of conflict on the interaction: (1) *continuation of interaction* (when the conflict does not lead to interruption of conversation and communication) and (2) *interruption of interaction* (when the conflict leads to interruption of conversation and communication). The connection between the type of interpersonal relationship and immediate effect of conflict has not been established ($\chi 2$ (5)=1.87, p=0.867). Conflicts with different persons end up with the interruption or continuation of communication to the equal extent.

TABLE 4. AFFECTIVE TONE UPON CONFLICT AND RELATIONSHIP TYPES

		Affective tone upon conflict				
		Very unpleasant	Unpleasant	Pleasant	Very pleasant	Total
		f	f	f	f	f
Relationship types	peers	10	14	25	13	62
	friend	1	3	11	4	19
	romantic partner	2	7	4	4	17
	teachers	1	4	2	2	9
	parents	8	45	40	7	100
	siblings	14	15	31	17	77
Total		36	88	113	47	284

Impact of conflict on interpersonal relationship tells about long-term effect of conflict. The research reveals the following long-term effects of conflict: (1) *aggravation of relationship* (when conflict leads to aggravation of the existing relationship); (2) *interruption of relationship* (when actual conflict leads to cooling and interruption of relationship); (3) *no effects* (when conflict does not influence the quality of social relationship); (4) *improvement of relationship* (when the conflict leads to improved quality of relationship). The results obtained in this research show that there is statistically important connection between the type of interpersonal relationship and impact of conflict on the existing relationship ($\chi 2$ (15) =33.13, p < 0.05). As it can be seen in the data shown on Table 5, relationships are damaged more often upon conflicts with peers, while in conflicts with parents, relationships are improved or conflicts have no effects on the existing relationship.

TABLE 5. CONFLICT IMPACT ON THE RELATIONSHIP AND RELATIONSHIP TYPE

		Conflict impact on the relationship				
		Aggravation	Interruption	No effects	Improvement	Total
		f	f	f	f	f
Relatio-nship type	peers	14	3	36	9	62
	friend	6	0	9	4	19
	romantic partner	2	1	12	2	17
	teachers	3	0	6	0	9
	parents	8	1	77	14	100
	siblings	2	3	64	8	77
Total		35	8	204	37	284

Duration of conflict is length of the given conflict episode. This research distinguishes six levels of conflict duration, where the first three represent variations in duration of short conflicts, and another three levels encompass variations within long conflicts. The following categories were used: (1) *extremely short-term conflicts* (conflict episodes that last less than 5 minutes); (2) *short-term conflicts* (conflict episodes that last between 10 to 15 minutes); (3) *moderately short-term conflicts* (conflict episodes that last around half and hour), (4) *moderately long-term conflicts* (conflict episodes that last around one hour); (5) *long-term conflicts* (conflict episodes that last several hours), and (6) *prolonged conflicts* (conflict episodes that last several days). This research shows that there is statistically significant correlation between the type of interpersonal relationship and conflict duration ($\chi2$ (25) =40.16, p < 0.05). Short-term conflicts are more represented with parents and siblings (see Table 6).

TABLE 6 CONFLICT DURATION AND RELATIONSHIP TYPES

		Conflict duration						
		Short conflict			Long conflict			
		Les then 5 min	10-15 min	30 min	Hour	Several of hours	Several of days	Total
		f	f	f	f	f	f	f
Rela-tio-nship types	peers	29	10	7	4	2	10	62
	friend	8	5	0	1	2	3	19
	romantic partner	3	3	4	4	0	3	17
	teachers	3	3	1	0	0	2	9
	parents	41	31	12	5	3	8	100
	siblings	39	25	6	5	1	1	77
Total		123	77	30	19	8	27	284

DISCUSSION

The obtained results show that the frequency and contents of conflict episodes depend on other side in conflict. The majority of the most important conflicts occur in the relationship with parents (35.2%), siblings (27.1%) and peers (21.8%). The most often areas of conflicts are the following: unfulfilled obligations (20.07%), resource distribution (16.9%) and damaging relationships (16.55%). However, certain conflict areas are more often present in some interpersonal relationships. Therefore, unfulfilled obligation is the conflict area most often represented in conflicts with parents (15.5%), distribution of resources in conflicts with siblings (8.8%) and parents (7%), provocation in conflict with peers (6%) and siblings (5.6%), damaging relationship in conflict with peers (6.3%), romantic partner (4.2) and best friend (3.2%) and injustice in conflicts with teachers (2.5%). Additionally, certain elements of the most important conflict are differently perceived depending on who adolescents are in conflict with. It has been found that statistically significant connection exist between interpersonal relationship types, on one hand, and assessment of the importance of conflict partner, outcome of conflict, affective tone upon conflict, impact of conflict on the relationship and duration of conflict, on the other. Teachers and peers are assessed as less important partners in conflict than parents and siblings. In conflicts with peers, adolescents more often end up as winners and in conflicts with parents as losers. Conflicts with parents are more unpleasant than conflicts with peers. Relationships are damaged more often upon conflicts with peers, while in conflicts with parents relationships are improved or conflicts have no effects on the existing relationship. Short-term conflicts are more represented with parents and siblings. These findings are in compliance with the findings obtained in previous researches focused on the most often conflicts of adolescents and they point to similarities in perception of characteristics of the most frequent and most important conflicts in adolescents (Petrović 2008a and Petrović 2008b, Petrović, 2009). The findings show that it is necessary to have in mind who adolescents are in conflict with (whether it is a peer, friend, romantic partner, parent, brother, sister or teacher) every time we consider or try to explore the developmental role of conflict in adolescence, since only then we will be able to come to relevant insights and implications.

In contrast to previous researches (Petrović 2008a and Petrović 2008b, Petrović, 2009), in this research significant differences are not determined with regard to the perception of the following elements: initiation of conflict, conflict resolution strategies and post-conflict interaction. These findings point to specific characteristics of the most important conflicts that are present regardless of who is other side in conflict. The first characteristic is the reduced ability of perspective taking. Since these conflicts are for them the most important, adolescents are not capable to decentre and therefore they more often perceive other side as the one that has initiated the conflict, instead of perceiving themselves as initiators of conflict. The second characteristic is their pronounced competitiveness. Since

they are conflicts of utmost importance, adolescents use competition as the most frequent conflict resolution strategy and they try to achieve what they want at all costs. The results of these characteristics of the most important conflicts are that almost every second conflict ends up with the interruption of interaction.

Apart from the fact that they confirm the thesis that characteristics of conflict most often vary with regard to persons adolescents are in conflict with, the results obtained in this research generate attention on characteristics of the most important conflicts as well. In order to completely determine differences between characteristics of the most frequent and most important conflicts, it is necessary to conduct further research, primarily one that would compare how the same participants perceive characteristics of the most frequent and most important conflicts.

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A NEW KIND OF SCHOOL PSYCHOLOGY FOR A NEW KIND OF SCHOOL: CONTEMPORARY CONSIDERATIONS[1]

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Abstract. *Psychology in school is a practice related to the general principles adopted by the school. The Political Pedagogical Project (PPP) of the school is its comunity´s letter of intentions, that guides its everyday work . This project is the result of a collaborative work made by all the people who live together in school, and is open to modifications. So, we believe the psychologist should be a school member, someone who participates in the elaboration and implementation of the PPP. As she/he studies developmental psychology and the conditions for educating people during their life span, she/he is a key-professional in the school. Nowadays, the Brazilian official education points to the inclusion of every citizen in school – Education for all – and elaborates programs for Ethnic and Gender Diversity, and Education for the Human Rights. Therefore, it is not enough for the psychologist to know Developmental and Educational Psychology. It is essential that she/he can deal with these contemporary challenges. In this sense, in the University of Brasília, we have two Programs – Filoesco and the Aion Space – that introduce Psychology students in interdisciplinary groups in which they experience a philosophical practice of reflection about ethical questions on diversity issues.*

Keywords: *School Psychology, diversity, human rights, Filoesco, Aion Space*

INTRODUCTION

School Psychology may undoubtedly be thought as the Psychology practiced in schools. However, this specification of place does not define it as a practical-theoretical field. All it does is show the focus of its delivery: matters of education, teaching-learning, and of the teacher-student, student-student and school-family relations. This focus, nonetheless, offers a wide scope, in the manner that in order to consider education, teaching-learning, and the relations in schools and of those with other institutions, School Psychology takes in other specificities of Psychology as a science and as praxeology. It makes use of its knowledge in the fields of Personality Psychology, Psychology of Learning, Developmental Psychology, Clinical Psychology, and Organizational Psychology. This complexity of School Psychology inside the very field of psychological studies also relies on one other factor which renders it even more complex: the diverse psychological 'schools', which undertake distinct epistemological, ethical and political engagements. In that manner, it is possible to have a School Psychology engaged with Behaviorism, with the Theories of Social Learning, with Theories of Development, Psychoanalytical Theories, Socio-Historical Theories, and others, or with a few combinations of these theories and practices.

In addition to the fact that School Psychology is an area which involves other areas in the field of psychology, as mentioned above, it also relies on the contribution from other fields of knowledge, such as Sociology, History, Anthropology, Economics, Politics, Philosophy, and others.

In this way, it can be said that School Psychology shows its specificities and allows for theoretical-practical developments which define its engagement with whichever may be its object of study, research and intervention, or its methodology of research and of specific activity in schools. We must also consider that the professional or researcher is who actually defines which School Psychology is to be adopted, consciously or unconsciously, in accordance with their theoretical-practical options, which implicates in epistemological, ethical and political engagements, as mentioned previously.

This constitution of the School Psychology field, which is characterized, hence, as a process which involves scientific aspects, as well as those of the psychologist's professional and personal backgrounds, is placed in a wider context – one of educational policies adopted by each country, in the midst of a culture and in a historical moment.

This is the point we would like to bring out, and which inspires the title of this text; which brings about the expressions "new kind of School Psychology" and "new school".

JUSTIFICATION

We wish to approach School Psychology in the context of the principle of "Education for All", adopted by the Brazilian government, and which has oriented its public policies in education. Among these policies, we draw attention to the creation of the Secretary of Continuing Education, Literacy and Diversity (Secad), established on Ministry of Education (MEC).

If formerly the question of diversity was handled in the core of global educational programs, almost as an exception, now the Brazilian Ministry of Education assumes the responsibility of developing programs aimed at the various facets of diversity, deeming education not as something directed towards a homogenized universal human being, guided by a boundary of normality, but as a process which comprehends the complexity and the cultural, historical, social, familiar and personal specificities of humans.

It no longer speaks of "human beings" in general, but of a specific group, in a specific historical moment and in specific social and familiar places, also taking into account the particularities of each person, their personal history and their manner of being in the world and of becoming human. Ultimately, it handles the many possibilities for humans – women, men, children, seniors; those historically placed, included, and constituent of a culture, of a social group – to live and coexist.

This change in the proposition for public policies in education, grounded on a new concept of being human, implicates in a new ethics of coexistence in diversity, in an education aimed at Human Rights, which provokes changes in schools, and, consequently, in School Psychology.

OBJECTIVE

The objective of this text is to perform a comprehensive analysis of the character transformation process of School Psychology, concerning changes in schools prompted by contemporary educational public policies directed to Diversity and Human Rights.

METHODOLOGY

This is a comprehensive and interpretative analytical study which takes in the history of School Psychology in Brazil and places it in the contemporary world. It makes a proposal for the reconfiguration of this field of knowledge and exercise, and of the initial and continued training of psychologists through work in a space of philosophical reflection.

DEVELOPMENT

In order for us to understand this change in perspective of public education in Brazil, it is best, for the purpose of this text, to recall the way in which School Psychology itself has been put into practice in Brazilian schools since the 1960s and 1970s, when it started to constitute itself as a field of study, research and intervention, up to the present.

Psychologists with clinical training are mostly used to receiving children with complaints related to behavior or learning difficulties in their offices so as to assess the latter's mental health or intellectual capacity. After evaluation through an interview and testing, they would issue a report and recommendations for the teachers and parents' stance, which, in the majority of times, came with a prescription from a neurological doctor with whom parents would also visit. This kind of effort would then generate a psychological report which classified the child in conformity with standards of normality on which the tests and the literature (mostly imported from The United States and Europe) on the "maturation" of the child were based. The rebound of this activity by the psychologist in the school context was the concept that the child was not able to learn or that it did not behave well due to organic flaws or disorders, specifically neurological. The prescriptions would either be related to generating an environment of control to direct the child's behavior, or medicine intervention to correct any organic problems.

The presence of psychologists in schools started in organizations that took in "exceptional" children with intellectual and mental "deficits", known as APAES[1], and other similar organizations. This shows that those who needed psychological assistance were those considered "abnormal"; those who did not live up to social expectations in terms of intellectual, motor, social and affective development. In this context, psychologists would make an initial evaluation, in the quality of a triage, classifying the children in levels that would qualify them to attend one classroom or another, according to their educability. Psychology had the character of an agent of exclusion, of segregation of children.

In the case of children treated in offices by clinical psychologists, the latter would include in their work routine visits to their clients' schools in order

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[1] Associação de Pais e Amigos dos Excepcionais (Association of Parents and Friends of Exceptional Children) is a non-profit organization managed by the parents of "exceptional" children, and it relies on educators and professionals such as psychologists, speech therapists, occupational therapists, physiotherapists, doctors and dentists. It functions as a school, with some clinical and psychopedagogical assistance. These organizations still exist, and their character has followed school inclusion-related changes recommended by the government as much as possible.

to interview teachers on the behavior of the child in school, and, eventually, run observation sessions in the classroom. This indicates the importance the school, alongside with the family, started gaining in the comprehension of the child's up-bringing.

Nevertheless, be it within the office, within the environment of special schools, or in visits to schools, School Psychology developed, initially, convened in the individual child not as a person in their integrity, but in their "abnormal", "difficulty", "deficit" aspects. School Psychology assumed the character of a "heal-ing" practice-theory, or of "orthopsychology", which scientifically diagnosed the problems observed by other people in everyday life, classified the child according to levels of "exceptionality" and suggested a corrective "treatment", attempting an approximation to the standard of normality.

In the subsequent years, the challenges of everyday practices and philo-sophical, anthropological and sociological criticism of the concept of "normality", along with the introduction of Jean Piaget's ideas in Brazil, promoted a change in the view of maturation to "development", and in that, emphasizing the psycho-logical aspect, differentiating it from the physiological, which was considered its substrate. Human beings started being seen as beings in development, in trans-formation; and education started to pursue both technical and material adequa-tion to the specificities of its procedures in each stage of development, seeking to educate children so they would reach adulthood in the most compatible manner with what was expected from an adult in our society. Autonomy and responsibil-ity were the aim, not only in intellectual, but also in affective, social, and moral terms.

The role of School Psychology is no longer one of classifying and labeling students, emphasizing their "deficits", but of constituting investigation work in which environment and learning conditions may be best – material, games, toys – in such a way that children interact with elements in the school context, with classmates, and with teachers, who become facilitators for the process of teach-ing-learning, or for the development of content as well as of attitudes and ac-tions. This interaction with the physical environment and with people promotes the construction of motor, intellectual, social-affective and moral development in children. The school psychologist acts as a guide to teachers as facilitators, observers of children's performance in school, and parent advisors, based on the theoretical comprehension of the Piagetian psychogenesis, refining physical and relational aspects of the school.

More recently, in 1990, the theories of Henri Wallon and Lev Vigotsky and their collaborators, of Marxist orientation, changed the concept of education in terms of emphasizing the role of the "other" in the construction of knowledge and of their own identity, on behalf of children. The teacher gains importance not only as a facilitator, but as a mediator in the relations of the child with the

environment and with other people. The teacher is the person who represents culture, through language and actions, and who creates situations for children to act in the construction of knowledge and the transformation of the environment and of themselves. The teacher is an active character, who organizes the context and who dialogs with the children, exchanges experiences with them, provoking their development. Child and school construct themselves mutually. According to Wallon, not only does the child adapt itself to the school, but also the latter should adapt to the earlier.

These two theoreticians see school as a space of relations, of transformation, and they allow for creative and unpredictable action, and not just for expected actions. They emphasize the historical, cultural and social insertion of school and aesthetical, ethical and political-oriented education.

The human being, in this theoretical socio-historical perspective, is a being in transformation, a being that becomes human in the relations mediated by language and culture. School is a space for experience, for life, and not just a preparation or a rehearsal for life. School is seen as a space for coexistence and collaboration – a community.

Taking on the theoretical-practical socio-historical perspective, combined with Paulo Freire's vision of education for citizenship and in citizenship, government policies for public schools in Brazil have stressed initial and continued training for educators, in an effort of transforming school into a community of which educators, students and families are a part, and that, together, they develop mechanisms to make shared management feasible, beginning at the construction of the Political-Pedagogical Project (PPP) in schools. The PPP is constituted in the charter of intentions which outlines school planning, with the participation of every actor.

The democratic school, oriented by the PPP, is wrought in the principle of "Education for All", favoring the access and participation of all people who are a part of the school community.

School Psychology, in this perspective, is one of the community stances, which confers with the administrative and pedagogical dimensions of the school. The school psychologist, along with the educational advisor, the pedagogical coordinator, the school office and maintenance staff – all educators – participate in cooperative work, exchanging experiences and knowledge in the carrying out of their specific jobs.

This democratic, all-inclusive school, which respects the differences and specificities of all – educators, staff and students – is the school in which it is possible to develop a contemporary perspective of respect towards diversity (of gender, sexual preference, ethnicity, race, and of intellectual and affective development, which leads to special educational needs) and towards Human Rights.

PROPOSITION FOR THE TRAINING SPACE

The context of this school, molded from everyday life through the exercise of democratic learning, of collective construction and of the participation of all, corresponds to the concrete conditions evidenced in the practices of the wider society in the contemporary world, and also to the production of knowledge which is not characterized by a universal and homogeneous discourse, but outlined by cultural multiplicity and human diversity.

In these conditions, how is it possible to promote initial training on a degree level to our Psychology students, and continued training to professional psychologists in such manner that they participate in this educational process taking the aforesaid characteristics into account? How to confer a degree to psychologists who are aware of diversity and Human Rights?

Certainly, Psychology course *curricula* have already started changing gradually in order to handle questions which have been raised not only in theory, but also in practice.

At the University of Brasilia Psychology Institute, the Department of School and Developmental Psychology, of which we are part of, along with traditional courses in Developmental Psychology, School Psychology and other related courses, such as Child and Adolescent Psychology, for example, have offered courses, such as Gender Psychology; Political Psychology; Psychology, Ethics and Human Rights; Cultural Psychology; and Philosophy and Epistemology of Psychology, focused on a critical view of the area, not only in its theoretical dimension, but also in practical. These courses refine professional training, in the sense that it becomes more open to contemporary questions which demand a less dogmatic Psychology and psychologists who are less "specialized" and more creative and flexible.

We also offer new internship opportunities to students in associative schools, in non-governmental organizations, in communities such as the Kalungas', *quilombolas* who dwell in towns near Brasilia, and in landless group settlements.

Amongst these alternatives of training we propose, we consider to be very meaningful the experiences we have offered Psychology students of participating in two Extension Programs (work outside of the University): the Philosophy in School Project – Filoesco – and the Aion Space Project, both aimed at the practice of Philosophy.

For twelve years we have been developing the Philosophy in School – Filoesco – extension project, which presents the introduction to philosophical practice in public schools, with children and teenagers, providing teacher training. It is a project of interdisciplinary character, involving students and teachers of Psychology, Education and Philosophy.

Students of Psychology, along with those of Pedagogy and Philosophy, undergo the experience of thinking with children, listening to them, and dialoging

with them. In this place, it is not us, adults, who teach something to children, who, one may think, would not be able to think for themselves. These children are able to think, to express themselves, to doubt, argument and counter-argument. This changes the concept that Psychology students have of children, who are, thus, considered capable and creative within the specificities of their condition. Furthermore, what is more important: we learn that children can teach us to view the world in a different way, to make questions, to be astonished, to resent; to broaden our possibilities of feeling, thinking, and acting.

From that experience, we created the Aion Space Extension Project. Aion is a space/time for reflection, practice and disclosure in Philosophy, Humanities and Arts. In the same manner in which there are museums and exhibitions dedicated to the Natural and Exact Sciences, Aion is a kind of nomad space/time of collective experience, which has been developing into a multi use space which promotes philosophical reflection (ethical, aesthetical, political and epistemological) on topics of Psychology, of the Human Sciences in general and of the Arts. Philosophy, as critical and creative thinking, converges with experiences and reflections in other areas of investigation, sustained as it is by feelings of admiration, astonishment and restlessness. These feelings are very strong in our first years of life, but they are soon overcome by social mechanisms which intend to naturalize human life in society, turning us into uncritical and conforming people, who are no longer surprised in face of happenings in human living, accepting them as natural and immutable. That way, Aion is a space of resistance against this naturalization of the human historical-cultural universe, suggesting it is contingent as opposed to determined, and that, as such, it can be redesigned, reconstructed, and re-signified, comprehending many possibilities for men, women and children to think, act, direct their lives and coexist in society.

Childhood is the paradigm of the space/time Aion, which encourages typical childhood attitudes; those of investigation and creative, playful and imaginative thinking, which question the meaning and the consequences of being, thinking and living the way we have lived and thought, giving us leeway to create new possibilities for humans to be in the world.

Aion is conceived as time in the sense of *becoming*, the time of coming to be, the time of transformation, as the name itself, *aion*, suggests. Aion is the time of "a child playing a game of draughts; the kingship is in the hands of a child" (Heraclitus, fragment 52). Aion is continuous and undetermined time, a time which is not *Chronos* neither *Kairos*. Aion intends to be the space/time of new possibilities and not the space/time of formal institutions, limited by rules and strict goals, such as the school or university space. Aion offers to take philosophical practice to the streets, to community life, or even to transform academic practices. It offers possibilities of exploring relations and dialogs among the production of knowledge, practices and popular and academic activities.

This kind of approach allows people involved in the philosophical investigation to think with autonomy, in a collective practice, about things which are usually considered immutable. That way, people are able to develop their imagination, in such a way that one may explore various possibilities of living in society.

Beyond school boundaries, the presence of the Aion Space in community groups provides cultural enrichment directed to adults, seniors, children and teenagers, making it possible to break new ground in the construction of creative and critical thinking and action.

This project has also been put into practice at the University of Brasilia with groups comprising of students, teachers, and staff from several different areas, and also in the UnB extension nucleus in a town in the Federal District not far from Brasilia, with members of the community. Recently, Aion has focused on working with multi age groups.

Aion intends to become a mobile space (on a bus) which moves around communities in the Federal District region; a space of resistance against the naturalization of the human universe, investigating feasible and different ways for women, men and children to relate to each other and live.

If space/time Aion was created to provide the experience of developing philosophy outside of school, today it proposes to take in people of different age groups – children, teenagers, adults and seniors – within communities.

In terms of training Psychology students, this reflexive, critical and creative experience is an opportunity for them to dialog with people from the community, to acknowledge reality in Brazilian social life, and for them to be in contact with colleagues from other areas. This diversifies thinking in itself, and it places topics discussed into different perspectives from those provided in the classroom.

Questions such as: What is educating? Humans – are we all the same? Are we all different? Who learns? Who teaches? What is insanity? What is love? Human beings, animal beings – beings in relations. Who has the right to have rights? What defines me as subjectivity? Why is science in the male gender? – have been a few of the mottos that have motivated us to reflect together, to inquire about our condition as Psychology scholars, to denaturalize the condition of science as the only type of reliable knowledge, and to pose radical questions which conduct us to new paths of thinking and acting.

These experiences require Psychology training to be more open and interdisciplinary, and it requires new professionals to be willing to accept changes that have occurred in the contemporary world which deal with epistemological, aesthetical, ethical and political questions, and also to engage in other theoretical-practical aspects that arise in the exercise of their profession.

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PSYCHOPEDAGOGICAL INTERVENTIONS IN YOUNG SCHOOLCHILDREN WITH ADHD

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Abstract. *Attention Deficit Hyperactivity Disorder is a cerebral dysfunction frequently occurring in the case of children, being one of the most common disorders for this age. ADHD can be defined as a syndrome with an early debut (before the age of 7) and it consists of a combination of inattention, hyperactivity and impulsivity that persists in time, sometimes until adulthood. By means of the psychopedagogical intervention program we are now putting forward, we wish to offer parents and teachers information about ADHD and also provide a few simple and easy-to-use techniques which can be applied both in school and family.*

Keywords: *ADHD, psychopedagogical intervention program, young schoolchildren, family, school.*

INTRODUCTION

Attention Deficit Hyperactivity Disorder, also known as minimal cerebral dysfunction, is a condition frequently occurring in children, being one of the most common disorders typical for this age. ADHD can be defined as a syndrome with an early debut (before the age of 7) characterized by a combination of inattention, hyperactivity and impulsivity that persist in time, sometimes until adulthood, occurring in individuals with normal mental development. When these symptoms become manifest they lead to difficulties in adapting to family, school and social environment. (Măgureanu, 2004) It is highly prevalent and has a strong personal and social impact, being often associated with other developmental or psychiatric disorders.

It is a problem of psychic nature, which, although not permanently curable, can be kept under control. Researchers believe that a neurologically inattentive,

hyperactive child is an individual with a hidden disability, who is in urgent need of intervention. (Sauvé, 2006)

Irrespective of how severe the situation may be, the therapeutical strategies especially developed will help the young children to gradually lead a normal life.

Through the psychopedagogical intervention program we have put forward we wanted to provide parents and teachers with information about ADHD, as well as with a few simple and easy-to-use techniques which could be applied in both school and family environment.

RESEARCH METHODOLOGY

Research purpose:

Studying the effectiveness of a psychopedagogical intervention to alleviate symptoms of Attention Deficit Hyperactivity Disorder in young schoolchildren.

The program has been structured on three intervention axes:

- child-focused intervention;
- family-focused intervention;
- teacher-focused intervention.

The reason behind elaborating this program structure was to allow control and manipulation of the main levels at which the symptoms associated with Attention Deficit Hyperactivity Disorder become manifest:

- family level;
- school level;
- social level.

Research objectives:

1. To study the effectiveness of the psychopedagogical intervention program concerning the alleviation of the major symptoms of Attention Deficit Hyperactivity Disorder in young schoolchildren:

- impulsivity;
- hyperactivity;
- inattention.

2. To study the effectiveness of the program concerning the low level of socialization associated with Attention Deficit Hyperactivity Disorder, and to increase learning efficiency.

Research hypotheses:

Getting the young schoolchildren diagnosed with ADHD involved in a psychopedagogical intervention program would lead to:

1. Alleviation of the major symptoms associated with ADHD;

2. Alleviation of the socialization difficulties associated with ADHD and an improvement in learning efficiency.

Methods and tools

- The interview
- The structured (quantitative) observation
- The experiment
- Raven Standard Progressive Matrixes
- Vanderbilt evaluation scales – Parent Answer Sheet
- Vanderbilt evaluation scales (monitoring) – Parent Answer Sheet
- Vanderbilt evaluation scales – Teacher Answer Sheet
- Vanderbilt evaluation scales (monitoring) – Teacher Answer Sheet (Wolraich, et all, 2003), adapted by us with the author's permission, on Romanian population, for Sibiu County
- The case study
- Statistico-mathematical methods

Population universe

The population on which this research was focused, and which provided the cases that lay at the basis of its elaboration, is represented by the sum total of the young schoolchildren in primary school that are on the records of the "Gh. Preda" Psychiatric Hospital of Sibiu for the February-March 2008 period, and who suffer from ADHD.

Selection of subjects

For the proceedings of the research we have selected 33 cases of young schoolchildren with ADHD from the "Gh. Preda" Psychiatric Clinic of Sibiu, Department of Pediatric Psychiatry, according to the following criteria:

1. The child's psychosocial profile:

- Presence of ADHD symptoms in behavior;
- Good level of development of the cognitive function – I.Q. higher or equal to 90 – mental age corresponding to chronological age.
- Low level of integration in school and social group.
- Low school performance.

2. Family:

- high interest in the child's biopsychosocial development;
- quality of collaboration with school;

    ‖ interest in getting involved in a psychopedagogical intervention program.

3. Primary school teacher:

    ‖ interest shown in applying personalized educational techniques to the schoolchildren diagnosed with ADHD.

Criterion 1 – the child's psychosociobehavioral profile

Following the discussions with the specialist team from the Department of Pediatric Psychiatry concerning the schoolchildren with ADHD that were under observation and treatment, 33 children have been identified as follows: 21 pupils – 1st grade, 6 pupils – 2nd grade, 5 pupils – 3rd grade, 1 pupil – 4th grade.

The selection of subjects has been made after interviews with the children's parents and primary teachers, as well as according to the results obtained after the parents and primary teachers of the 33 children with ADHD filled in the Vanderbilt Scale for Primary Teachers and Parents. The scores obtained by each of the schoolchildren has been recorded in their individual charts, because of the methodological requirement of using these results in building the pre-test profile for each of the children that would eventually remain subjects of the experiment.

It should be mentioned that until this stage of sampling, all the schoolchildren have met the requirements of the 1st selection criterion.

Criterion 2 – The Family

The parents of the schoolchildren have been contacted, and during some meetings, have been explained the purpose, objectives and strategies of unfolding the program, along with the educational reponsibilities that they would have to undertake within the program. Also, these meetings have made it possible to evaluate the interest and resources of each family for the child's education in general, and for the proposal of getting involved in an educational program, in particular.

It has been concluded that in the case of 6 children there is a weak response from the family regarding the collaboration for the proposed psychopedagogical program, and as a consequence, the children have been excluded from the program. It has been concluded that in the case of 6 children there is a weak rrr

Following the interviews, 27 of the families have agreed to get involved in the program.

The group under research was made up of : 18 pupils – 1st grade, 6 pupils – 2nd grade, 2 pupils – 3rd grade, 1 pupil – 4th grade.

Criterion 3 – The Primary Teacher

During some meetings with the primary school teachers of the children with ADHD who remained beneficiaries of the program, they have been informed about the purpose, objectives and strategies of unfolding the program, along with the educational responsibilities they ought to undertake. All the approached primary teachers have responded positively, expressing their position of active supporters of the program.

Common problems of the selected cases:

The children selected in view of getting involved in the psychopedagogical program have been diagnosed as suffering from ADHD by the interdisciplinary team of the "Gh. Preda" Psychiatric Hospital of Sibiu, Department of Pediatric Psychiatry. Following the collecting of psychological, family, school and social data of the children, we could conclude that ADHD affects the children in all these respects. Consequently, they have a poor self-image, and strong inferiority feelings due to the difficulties they are faced with in school and in society. These difficulties have to do with a weak sensory-motion experience, partial lack of behavior control, deficient acquisition of skills needed for daily activities, as well as shortcomings in developing correct learning and social skills and abilities.

> **The stage of case construction**
> **Psychological profile – symptom evaluation**
> **Testing of cognitive function:**
> It has been carried out based on the following tests:
> - *Standard Raven Progresive Matrixes* – development of cognitive function– I.Q. higher or equal to 90 in all examined subjects.
> - *Vanderbilt ADHD Symptom Evaluation Scale for Parents and Primary Teachers*

The pre-testing stage of the experiment

Between March and April 2008 the aplication of the *ADHD Symptom Evaluation Scale* for each of the 27 schoolchildren selected for being included in the program has been concluded, their results being recorded in their psychological charts (before becoming beneficiaries of the psychopedagogical program).

1. Evaluation of ADHD symptoms by the family

    (Vanderbilt ADHD Symptom Evaluation Scale for Parents)

2. Evaluation of ADHD symptoms by the primary teacher
    (Vanderbilt ADHD Symptom Evaluation Scale for Teachers)

The stage of experimental manipulation

Full coverage of the stages of the psychopedagogical intervention program has been achieved between April and June 2008.

Stages covered for the application of the psychopedagogical intervention plan:

Step 1: The parents observe the child's behavior in the home.

Step 2: The primary teacher observes the child's behavior in school.

Step 3: The parents and the primary teacher meet and talk about what they have observed concerning the child and highlight the worrying aspects that concern the child.

Step 4: The parents meet the psychologist and share with him/her their observations, as well as those of the primary teacher; they also offer means of getting in contact with the child's primary teacher: telephone number, his/her schedule in school etc.

Step 5: The psychologist innitiates an interview especially structured for the factors involved in the program: parents, child, primary teacher, from whom he/she may obtain data concerning the child's educational and medical record.

Step 6: The parents receive a number of brochures or information about ADHD, following which both them and the primary teacher fill in child behavior evaluation scales.

Step 7: The scales filled in by both primary teacher and parents are examined by the psychiatrist.

Step 8: Following the results obtained in the evaluation scales filled in by the parents and primary teacher, the psychiatrist determines the psychopedagogical intervention areas.

Step 9: The psychologist ellaborates a psychopedagogical plan focused on the intervention areas established together with the parents and the psychiatrist.

Step 10: The psychologist carries out, and the psychiatrist monitors the application of the intervention program, as well as the evolution of the child. The parents and the primary teacher fill in child behavior evaluation scales at the beginning and at the end of the psychopedagogical intervention program. (according to Feldman, 2007)

The Psychopedagogical Intervention Program

The program has taken into account the building of a home and educational environment that would favor the harmonious development of children with ADHD, by building a partnership that would involve the following intervention agents:

The County Educational Resources and Psychopedagogical Assistance Center of Sibiu

Manager – psychology professor Daniela Moldovan

Psychologists / school psychologists:

Valeria Purcia, Elena Morariu, Simona Crăciun, Simona Câmpean, Maria Opriș, Lidia Draghiță, Silvana Șerb, Cătălina Nechita.

The "Gh. Preda" Psychiatric Hospital of Sibiu, Department of Pediatric Psychiatry:

Dr.Cornelia Acaru, primary care physician– child neuropsychiatry; Dr.Sanda Elena Barb, primary care physician – psychiatry; Dr. Angela Muntean, primary care physician – psychiatry; Răzvan Pleteriu, chief clinical psychologist, Laura Orlandea, chief clinical psychologist.

The primary teachers and the parents of these children.

The interdisciplinary partnership has been designed on various intervention levels, in view of:

- as full a coverage of the family, school and social levels where ADHD symptoms become manifest, as well as of the associated disorders;
- identifying the basic educational principles in raising a child with ADHD;
- identifying the main areas for psychopedagogical intervention in view of alleviating ADHD symptoms, as well as those of the associated disorders;
- an active involvement of the intervention agents in controlling and alleviating ADHD symptoms in young schoolchildren, beneficiaries of the psychopedagogical intervention program;

Objectives of the psychopedagogical intervention program

General objective:

Facillitating a global development of the children with ADHD included in the program by means of creating a socio-educational environment adapted to their specific needs.

Specific objectives:

1. Ensuring informational as well as formative aid needed by the parents of children with ADHD;
2. Facillitating the professional optimization of the primary teachers working with children affected by ADHD;
3. Facillitating the development of the communicative as well as of the socio-affective function in children affected by ADHD;
4. Integrating the activities carried out by the members of the intervention team in a coherent educational and formative partnership to the benefit of the children who are subjects of the program.

- Beneficiaries of the psychopedagogical program:
- Children with ADHD
- Parents of children with ADHD
- Primary teachers of children with ADHD

The intervention team:
Professionals:
- School psychologists
- The interdisciplinary team of the „Gh. Preda" Psychiatry Hospital of Sibiu
- Volunteers:
- Parents of children with ADHD
- Primary teachers of children with ADHD

The unfolding of the informative/formative program for parents

The program for parents has amounted to a sum total of 10 formative (weekly) sessions. The parents of children with ADHD have acted both as representatives of the family as well as beneficiaries of this formative course.

Objectives:

- Familiarizing the parents with: the particularities of the Attention Deficit Hyperactivity Disorder in young schoolchildren; the problems posed by ADHD; information connected with the psychology as well as with the diagostic criteria, with the particularities and difficulties that these children have to deal with along the learning and development process (in terms of behavior as well as social and school integration).
- Observation and evaluation of the child's behavior; making the parents aware of educational mistakes that may occur in the behavioral correction of a child with ADHD.
- Improvement of atmosphere within the family; active listening; emotional communication; parent-child communication.
- Ways of reinforcing the parent-child relationship; focusing on the positive aspects of the child; unconditional acceptance; time dedicated to the child.
- Acquisition of behavioral management notions, as well as of behavioral methods and techniques of positive disciplining by the parents;
- Rewarding of positive attitudes; designing a plan for viable behavior; types of rewards; solving problematic situations;
- Co-operation with the child's primary teacher; behavioral monitoring cards; daily plan;

- Increasing the child's self-esteem; nurturing the child's self-confidence; highlighting the positive achievements; increasing awareness of the distinction between the child's behavior and person;
- The influence of games in the therapy of children with ADHD; developing socialization abilities; suitable types of games and toys.

The unfolding of the informative/formative program for primary teachers

This program has amounted to a sum total of 7 of (weekly) formative sessions.

Objectives:

- Familiarizing the primary teachers with the particularities of Attention Deficit Hyperactivity Disorder in young schoolchildren. Informing them about the set of problems associated with ADHD by offering them information concerning the psychological aspect and the diagnostic criteria, the particularities and difficulties that these children have to deal with along the learning and development process (in terms of behavior as well as social and school integration).
- School teaching-learning process; school adaptation; behavioral interventions;
- Well-established structure and routine; using the gradual system of structuring the class; the three „R"s: routine, regularity and repetition; careful monitoring of behavior; class management.
- Acquisition of ergonomic principles and rules by the teachers that would offer the ADHD child a secure environment.
- Lessons that are as attractive as possible, getting the child involved in a work group; primary teacher-child interaction; combining verbal explanations with practical demonstrations.
- Identifying behavioral problems; behavioral class management system; rewarding well-achieved tasks;
- Partnership among children; well-defined rules; co-operative learning; playing and socializing time.

Counselling children with ADHD

Objectives:

- To enable the child to get over difficult emotional problems;
- To enable the child to achieve a certain congruity among thoughts, emotions and behavior;
- To make the child feel good about himself/herself

- To enable the child to accept his/her limits;
- To determine the child to change behavior that has negative consequences;
- To enable the child to function comfortably and in an adaptive manner in an external environment (both at home and in school);
- To create such conditions for the child that he/she could follow his/her development stages.

RESULT ANALYSIS AND INTERPRETATION

Age group distribution (school class) in the lot under study has been as follows:

18 pupils – 1st grade, 6 pupils – 2nd grade, 2 pupils – 3rd grade, 1 pupil – 4th grade (Fig. 1).

In this paper we have chosen to deal with the age group between 6 and 7 (1st grade), which has turned out to be the most numerous one, further proof to a correct identification of the disorder by both parents and primary teachers mostly at the child's entering the school system.

The next age groups are 7-8 years old (2nd grade), 8-9 years old (3rd grade).

In contrast to this, the age group 10-11 years old (4th grade) is significantly low in the studied lot.

This fact is in accordance with DSM-IV which requires that core ADHD symptoms should become manifest before the age of 7.
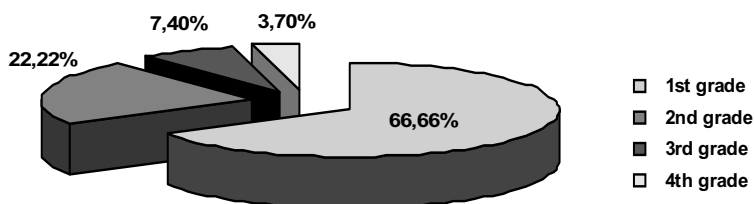
FIGURE 1. Age group distribution (school age) in the studied group

Sex ratio – in the studied lot has been of 5,75:1. The distribution according to sex indicates the predominance of boys as compared to girls. These values are similar to those in the general population. (Fig.2)

In children, ADHD is more frequent in males, with a sex ratio of 3,6:1. The difference between the sexes is highly significant. Girls diagnosed with ADHD are affected from a cognitive or attention point of view. (Ivanesei, 2008)
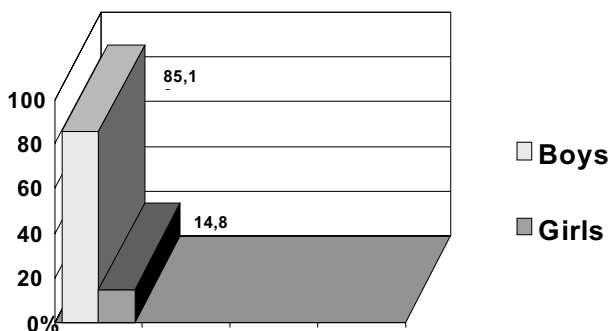
FIGURE 2. Lot distribution according to sex ratio

According to **the degree of family disintegration** (fig.3), in the group stu-
died, 4 subjects out of 27 come from disintegrated families, however a cause-effect
connection between the family environment and ADHD diagnosis could not be
established.
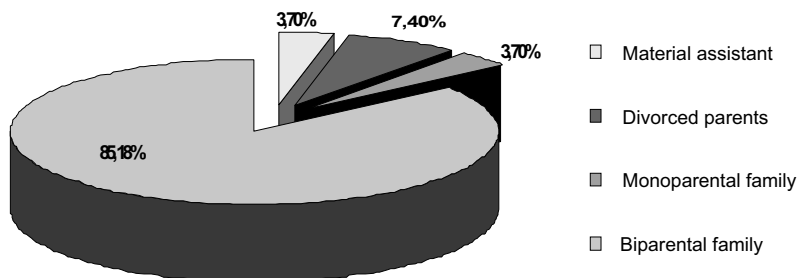
FIGURE 3. Degree of family disintegration in the studied lot

In the group analyzed according to ADHD subtypes, the combined subtype
is predominant, the other ones ranking very low; a possible explanation would be
that spotting children with a high degree inattention, hyperactivity and impulsivi-
ty was easier because this type of behavior can be perceived faster by parents and
primary teachers. (Fig. 4).

DSM trials and other subsequent clinical studies have shown that the com-
bined type is predominant, as compared to the type where attention deficit pre-
vales. However, because the attention deficit subtype has the highest probability
of being underdiagnosed, its prevalence cannot be deduced from clinical groups.
(Iancu, 2007).

18,51%

11,11%

70,37%

Combined
subtype

Inattentive
subtype

Hyperact./impuls.
subtype
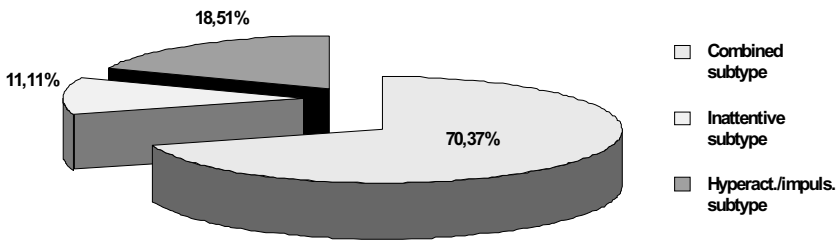
FIGURE 4. Distribution of ADHD cases according to subtypes

The statistical processing – (SPSS, t test) of data concerning the effects of the independent variable upon the dependent variables – has been carried out by means of the t test for the difference between the average of two dependent samples (pairs), by comparing the significant differences between the pair sample average data as following the results obtained from the pre-testing and the post-testing in the following tests:

- Vanderbilt ADHD symptom evaluation sheet– filled in by parents
- Vanderbilt ADHD symptom evaluation (monitoring) sheet– filled in by parents
- Vanderbilt ADHD symptom evaluation sheet– filled in by primary teachers
- Vanderbilt ADHD symptom evaluation (monitoring) sheet– filled in by primary teachers

The t test concerning the difference between the average values of two dependent samples allows for the evaluation of the significance of the variation in a certain characteristic, in the same subjects, in two different situations (for example, "before" and "after" a certain condition has been acted out), or in two different contexts, irrespective of the moment when they become manifest. The advantage of this statistical model is that it captures the so-called "intrasubject" variation, because the calculation basis is represented by the difference between the two values measured for each subject separately. (Popa, 2008)

Reporting the research results

Considering that in all the obtained results the p value <0.05, the null hypothesis is rejected.

It has been accepted as research hypothesis, that getting young schoolchildren with ADHD involved in a psychopedagogical program leads to:

1. Alleviation of the major symptoms of Attention Deficit Hyperactivity Disorder:

- ⫸ nattention
- ⫸ impulsivity
- ⫸ hyperactivity

2. Alleviation of the socialization difficulties associated with Attention Deficit Hyperactivity Disorder and an increase in learning efficiency, as observed from a sample of 27 subjects, for:

Parent evaluation

$t_{.05}(26)= 9,36, p<0,05$, ADHD prevalently inattentive subtype
$t_{.05}(26)= 11,19, p<0,05$, ADHD prevalently hyperactive/impulsive subtype
$t_{.05}(26)= 12,23, p<0,05$, ADHD combined inattentive/ hyperactive subtype
$t_{.05}(26)=6,067, p<0,05$, school efficiency / socialization

Teacher evaluation

$t_{.05}(26)= 10,01, p<0,05$, ADHD prevalently inattentive subtype
$t_{.05}(26)= 8,34, p<0,05$, ADHD prevalently hyperactive/impulsive subtype
$t_{.05}(26)=11,13, p<0,05$, ADHD combined inattentive/ hyperactive subtype
$t_{.05}(26)= 7,13, p<0,05$, school efficiency / socialization

Psychometric data of the Vanderbilt Evaluation Scales

The reliability studies (by calculating the *Cronbach alfa* index) show a very high value ($\alpha > 0,70$) for most of the sections in the scale referring to ADHD. The exception is the "anxiety/depression" section in the Vanderbuilt Evaluation Scale for Parents, where $\alpha = 0,52$. (Some authors consider as acceptable a value of 0.5 of the *Cronbach alfa* index in the case of scales with a small number of items: 10-15). This value is somewhat justified, since the section comprises a small number of items (7). There has been no further pressure to modify or replace the items in this section, because this paper has focused especially on the ADHD symptoms, and less on co-morbid disorders.

The obtained data support the high psychometric qualities of the instrument in question. An "internally consistent" scale offers us the guarantee that the items of our instrument "go hand in hand", that they measure the same psychological "construct"; nevertheless, this does not as yet allow us to affirm that it measures exactly what it purported to measure in the first place. (Popa, 2008) This problem has been checked through validation studies.

Testing the validity by comparing the results obtained using the Vanderbuilt Evaluation Scales for ADHD to the result obtained using the CIM 10 Structured Diagnosis Interview shows that the instruments measure attributes and behavioral aspects which are similar but not identical.

Research limitations

- The Vanderbuilt scales for the evaluation/monitoring of ADHD symptoms have a restrictive transcultural adaptation, for Sibiu County only;
- The results obtained in this research cannot be generalized to the scale of the entire community in question. The factors that could influence it negatively are as follows: the nature and representativity of the sample; the manner of data collection; the period during which the research has been carried out; the various systematic error sources, among which the over-evaluation of the obtained results by the evaluators, parents and teachers, respectively. However, this aspect may have a positive connotation, as far as the effectiveness of the proposed program, as well as the positive appreciation of results go.

CONCLUSIONS

- The processing and evaluation of the research data have revealed the effectiveness of the psychopedagogical program ellaborated by us, concerning the symptoms of attention deficit hyperkinetic disorder in young schoolchildren.
- The structure of this program (on three intervention axes: parents, primary teachers and children) has allowed for the control of the main areas of manifestation of attention deficit hyperactivity disorder (family, school and social ones), and its application has entailed significant alleviation in ADHD symptoms (attention deficit, hyperactivity, impulsivity), as well as in associated disorders (socioaffective integration, learning efficiency).
- The objectives of the program have been achieved, by developing both in parents and in primary teachers a set of educational and developmental abilities adapted to children with ADHD, as well as through their correct application by parents (in the family as well as social environment), by the primary teachers (in class), and by the school psychologists (in the school psychopedagogical counselling office), in view of relieving ADHD symptoms.
- The present paper meets the needs of school psychologists, teachers, parents and especially those of the children with ADHD, by offering a model of intervention in attention deficit hyperactivity disorder in young schoolchildren, a model which has aimed the following aspects of the problem in question:
- As full coverage as possible of the main areas of manifestation of attention deficit hyperkinetic disorder (family, school, social);
- Identification of the educational principles which are basic and mandatory in the raising of ADHD children;

⚜ Active involvement of intervention agents (psychologists, psychiatrists, parents, teachers) in controlling and alleviating the associated ADHD symptoms, in young schoolchildren that were beneficiaries of the psycho-pedagoical intervention program;

⚜ The psychopedagogical intervention programs can be an alternative for the parents that are resistant to the idea of medicating their child on an indefinite term, or for those children that develop intolerance to Strattera (atomoxetine), enabling an improvement in the lives of the children and of the family members alike.

⚜ Behavior changing techniques, the training, educating and counselling sessions for the children, parents and teachers are enough for controling light forms of ADHD symptoms. Usually, behavioral interventions are used along with medication in the moderate and severe forms.

⚜ The psychopedagogical therapy, initiated by specialists and later applied by the parents and teachers, represents a basic element in approaching children with ADHD. The psychopedagogical intervention program we have put forward could prove to be an effective learning tool for parents and teachers alike, by means of simple and easy-to-use techniques.

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FACTORS INFLUENCING PROFESSORS USING THE EMAIL: CASE IN INDONESIA

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Abstract. *Electronic mail is one of the information communication technology products that successfully connect an individual with other individuals and groups. The characteristics of electronic communication which is not synchronized, enables users to send a complete document in various forms and large capacity from other remote places. This convenience has invited thousands and even millions of email users in the world. However, among the lecturers of Gadjah Mada University (GMU), it is much lower compared with the overall number of UGM lecturers. In addition, a substantial numbers of lecturers who have email account do not use this email system in their work. This study aims to test theoretical models that predict the use of electronic mail in a high power distance and collectivistic culture like Indonesia by including personality variables (extraversion and openness to the experience), perceived of usefulness, perceived ease of use as antecedent variables for attitudes, subjective norms, perceived behavior control and intention. Three hundred and one lecturers of GMU participated in this research. Structural Equation Modeling using AMOS-16 was applied to analyze the data. It was found that perceived ease of use the email provides the largest contribution to the frequency of email usage. The perceived ease of use contributes more effects to the email usage compared to Intention in determining the frequency of email use. Extraversion does not correlate with attitudes, subjective norms, and perceived behavior control. It was found that extraversion influence the use of email through Intention. The perceived usefulness and openness influence the use of email through attitude, subjective norm, and intention. Meanwhile, openness influences frequency of email usage through perceived behavior control.*

Keywords: e*mail, extraversion, openness, perceived ease of use, perceived usefulness.*

INTRODUCTION

The advancement of information and communication technology (ICT) has contributed to a variety of benefits to mankind, not only in work, education, business but also to everyday social life. Minsky and Marin (1999) suggests that advanced organizations are identified by the use of electronic mails. In a much more extreme sense, Rice and Gattiker (2001) suggested that the longevity of an organization will not sustain should that organization fail to provide adequate concern to the advancement of this computer based technology.

In Indonesia, the AC Nielsen (2001) research institute reported that 81% of Indonesian internet users make use of internet facilities to send and receive electronic mail. Research conducted by Pancaputra (2003) related to ICT among researchers in the Agriculture Department revealed that 87,5% use it to send and receive electronic mail.

Two approaches were conducted by the researcher to identify email usage among GMU professors, namely: (1) total usage of the ugm.ac.id email account, (2) total membership in the dosenUGM@yahoogroups.com mailing list. The first approach revealed that from 7210 users of ugm.ac.id, 1.232 consists of professors, while the remaining consists of employees or students. From the 1.232 of professors having email accounts in ugm.ac.id, it was discovered that not all email accounts were active. Some of mails sent to them were unable to be delivered because of bouncing or because of unknown addresses. The second approach observed membership in the dosenUGM@yahoogroups mailing list. From this mailing list, 985 members were reported, comprising of both active and non-active members. It was apparent from the database that 70% of the mailing list members also have ugm.ac.id email accounts. These methods allow the researcher to estimate total email usage among GMU professors. From an overall total of 2.273 (source GMU Human Resources Directorate, 8 April 2009), it is estimated that email usage only comprises 50% of the overall total.

Based on the data, the researcher proposes the research question on the psychological factors that influence GMU professors to use electronic mail.

THEORIES RELATED TO TECHNOLOGY ADOPTION

There are at least two perspectives that could be used to understand technology adoption, the product perspective namely adoption of innovation model proposed by Rogers (1983; 1995) and the human perspective, namely the technology acceptance model (TAM) proposed by Davis (1989) as a development of the theory of reasoned action. The following section will briefly discuss these two perspectives and will conclude with discussions on the theory of planned behavior (Ajzen, 2005) as a development of the theory of reasoned action (TRA) proposed by Fishbein and Ajzen (1975).

INNOVATION ADOPTION MODEL

This theory concerning innovation was first proposed by a sociologist in his work 'Diffusion of Innovation Theory' in 1962 (Rogers, 1983). This theory initially emerged through the works of Gabriel Tarde, a criminologist and social psychologist that had proposed the theory of imitation. Tarde (Rogers, 1983) tried to understand the spread of innovation products in agricultural societies. Rogers elaborated the theory of imitation and argued that innovation does not necessarily imply new inventions, but could also refer to something already existing that had just been newly adopted. An example of this is nylon which was actually created in 1928 but only begun to become of use eleven years to come. According to Rogers, the success of innovation may only be established when it has been adopted by the society. It is based on this that Rogers uses the term innovation adoption model implying that innovation must be followed by adoption.

The innovation adoption model consists of four main elements, namely innovation characteristics, chosen communication channels, time required for creation process until innovation adoption, and social systems that become targets of innovation adoption. Among those four characteristics, innovation characteristics receive the greatest attention in discussing the success of innovation adoption.

Within this theory, Rogers (1995) added that there are at least five characteristics that must be possessed by innovative products:

Relative advantage compared to other existing products. These advantages could be judged from economical, social or psychological aspects.

Compatibility with values, needs and past experiences of the society. Rogers later stressed that compatibility in this sense does not refer to technical aspects of the product but instead social community aspects.

Simplicity as opposed to complexity related to efforts required within its adoption. Good innovation does not bring difficulties to the user in adopting the technology.

Triability without any binding relationship before the individual adopts the product.

Observability by others at the moment innovation is applied. The easier it is to observe the more appealing it would be to adopt

THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR

Theory of Reasoned Action (TRA) lays its assumptions on the notion that human behavior follows general rules, that all information, both implicitly and explicitly, influences an individual's consideration before getting involved in, or performing a certain behavior. The theory's emphasis is on intention that is believed to guide

motivation to the direction of performing or not performing a particular behavior. In the TRA, intention and behavior are functions of two major determinants, namely individual personal factors consisting of (a) attitudes towards behavior, (b) subjective norms (Ajzen, 1975). Theory of reasoned action has been studied in numerous contexts including mothers' behaviors of breast feeding (Manstead, Proffitt, & Smart, 1983), family planning (Ajzen & Fishbein, 1980) and etc. These studies suggest the significance of attitudes and subjective norms in predicting behaviors.

The development of TRA is done to include control factors that frequently influence individuals in performing their behaviors (Godin & Kok, 1996). The theory of planned behavior (TPB) adds one more antecedent (c) perceived behavior control (Ajzen, 1991).

Perceived behavior control is an individual's perception of how easy or difficult it is to perform a particular behavior (Ajzen, 1991). In explaining about perceived behavior control, Ajzen distinguishes this from locus of control (Rotter, 1990). The center of control is related to an individual's relatively stable beliefs in dealing with various situations meanwhile behavior control may change depending on the situation and the type of behavior being performed, for example the belief to control proficient computer use is referred to as perceived behavior control.
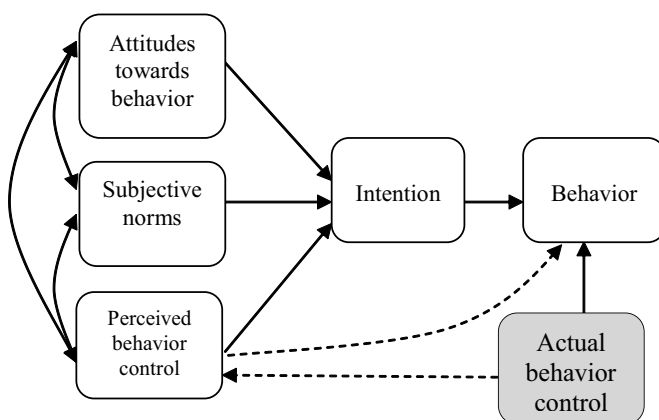
FIGURE 1. THEORY OF PLANNED BEHAVIOR (Aizen, cited in Beauducel, et. al, 2005)

In the TPB, perceived behavior control and behavioral intentions simultaneously predict whether a particular behavior is performed or not. Perceived behavior control is related to an individual's beliefs of the available resources and

opportunities to perform a behavior. The larger the opportunities and resources believed to be acquired by the individual, the greater likelihood for the individual to believe that he/she could control that particular behavior.

TECHNOLOGY ACCEPTANCE MODEL

Davis (1989) developed the theory of reasoned action (Ajzen, 1975; 1991) and adoption of innovation theory (Rogers, 2003), specifically to understand human behaviors related to technology. Davis proposed that individual behaviors of technology usage is influenced by perceived of usefulness and perceived ease of use. Davis defined perceived of usefulness based on the definitions of the word useful: capable of being used advantageously, or may be used for advantageous purposes. Utility of electronic mails refers to the perceived of usefulness believed by the individual should they use electronic mails. The second variable is perceived ease of use or in other words without difficulties or effortless. Thus, perceived ease of use is an individual's belief that the electronic mails are not difficult to use and does not require great effort in its usage (Davis, 1989).
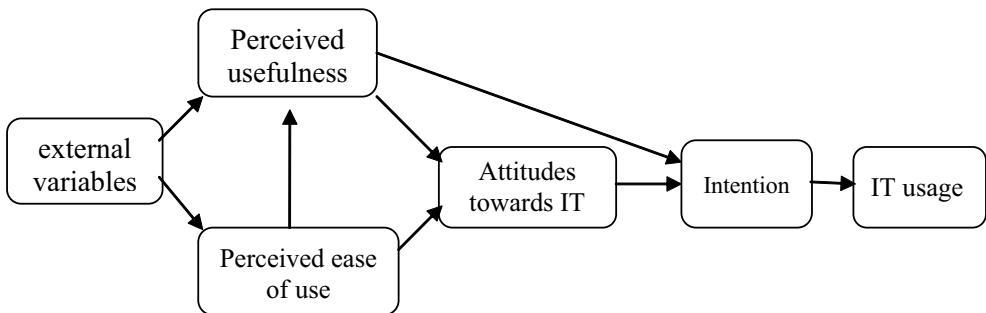
FIGURE 2. TECHNOLOGY ACCEPTANCE MODEL (Davis, et al., 1989)

The technology acceptance model is indeed superior in giving a simple explanation of ICT behavioral dynamics. However, numerous critics (Mathieson, 1991) have argued that TAM does not place subjective norms (Ajzen, 1975) into consideration of which has proven to be influential in predicting behavior (Ajzen & Fishbein, 1980; Manstead, Proffitt, & Smart, 1983). The role of subjective norms in the context of ICT usage has been studied by Calantone et al., (2006) as well as Mao and Palvia (2006) in China. As a country with a collectivist culture and high power distance (Hofstede, 2005), behaviors and authority policies are more influential compared to individual decisions.

PERSONALITY CHARACTERISTICS AND EMAIL USAGE

Increases in ICT usage in daily life has not only transformed ways of working and communication but also transformed the society's life style (Tapscott & Williams, 2008). The traits approach put forward by Cattell, and also later elaborated by Eysenck (in Pervin & John, 2001) is often used to understand the likelihood of individuals to use technology. According to the traits approach, certain personality characteristics that are in congruence with ICT characteristics may become predictors in ICT usage. Numerous personality characteristics that have been associated with ICT usage include innovative attitudes (Minsky & Marin, 1999; Thatcher, 2002), self efficacy (Eastin & La Rose, 2000; Minsky & Marin, 1999), emotional intelligence (Engleberg & Sjoberg, 2004), and extraversion (Maldonado et al., 2001; Hamburger & Ben-Artzi, 2003; Mukahi & Corbitt, 2004; Karemaker, 2005).

Within the framework of Big Five, innovative characteristics and self efficacy are classified under the personality characteristic openness. This encouraged Ramdhani (2007) to conduct a meta-analysis towards several studies associating personality characteristics and email usage. The results of the meta-analysis demonstrate that the contribution of extraversion ($r^2 = 0,33$) and openness to experience ($r^2 = 0,30$) as personality characteristics may become predictors in technology usage.
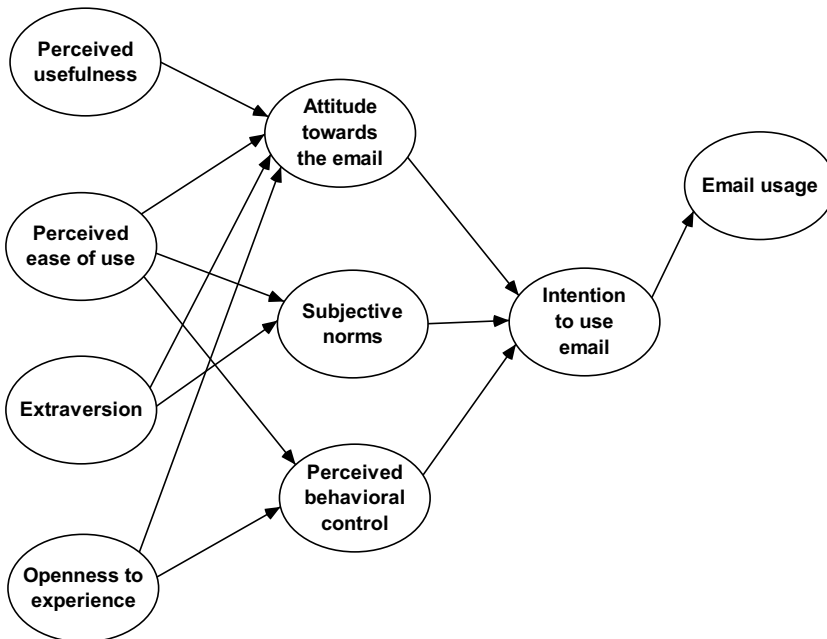
FIGURE 3. THEORETICAL MODEL OF EMAIL USAGE

A THEORETICAL MODEL OF EMAIL USAGE

The theory of planned behavior, TAM and two personality characteristics, referring to extraversion and openness, become the primary focus in building a model of relationship between variables that influence electronic mail usage (Figure 3). The variables in TPB and TAM will be used in developing a theoretical model. In consideration of individual factors, the researcher adds two personality characteristics of openness and extraversion. The tested theoretical model is displayed in figure 3.

HYPOTHESES

The researh variables are displayed in Figure 3 supported with the data set.

RESEARCH METHOD

RESPONDENTS

Three hundred and fifteen respondents were involved in this research. Respondents consist of professors from 18 different faculties in GMU. Subsequent screening of complete responses and outliers resulted in a remaining 269 respondents that were selected for analysis. Observing from the frequency of electronic mail use, the research respondents were heterogenic. From the 269 respondents, 11 answered that they haven't used electronic mail for the last three months. From the 258 respondents that routinely use electronic mail, 116 (44,9%) answered that they use electronic mail on a daily basis. Even 62 respondents answered that they are always connected to the internet to access their electronic mail.

MEASUREMENTS

In general, the measures could be divided into two types, namely:

Measures arranged based on the Likert scale model. Four measures of the Likert scale model used in this research include the perceived of usefulness' scale consisting of 3 items, and perceived ease of use, consisting of 4 modified items from the scale developed by Davis (1989). The extraversion scale consists of 3 items and openness scale of 4 items as modification of the Big Five Inventory from Pervin and John (2001).

Measures arranged and developed based on the theory of planned behavior consisting of three scales including the attitudes scale, subjective norms scale, and perceived behavioral control. The attitudes scale consists of 5 paired items and 4 independent items, subjective norms consists of 4 paired items and 1 independent item, perceived behavior control consists of 2 paired items and 2 in-

dependent items, and intention consists of 2 items. The frequencies are directly asked to the respondents using 3 items in form of factual questions related to electronic mail use. All Likert based scales have been tested for internal consistency from previous research (Ramdhani, Indrastuti, & Ancok, 2009; Ramdhani & Dewi, 2009). Meanwhile, item validity from the TPB based scales are tested using factor analysis.

Before using the measures to test the theoretical model, confirmatory factor analysis towards the observed variable is conducted to discover any latent variables. The results of the analysis reveals that all factors have met methodological requirements with minimum factor loadings of 0,63 – 0,84. Therefore, the measurement model may be used in testing fitness of the theoretical model proposed in this research.

RESULTS AND DISCUSSION

Criterias of absolute fit indicate that the model is not entirely supported by the data. Chi-square scores = 157.22 (P = 0.0) and RMR = 13.25 are too large suggesting that the discrepencies between the proposed theoretical model in the hypothesis compared to the estimated model are too great. However, if the two other criterias were inlvolved namely, GFI = 0,93 (> 0,90) and RMSEA = 0,08 therefore the theoretical model indicates an adequate fit. By having two criterias indicating adequate fit and, two others not, therefore based on absolute criteria, this model is slightly marginal in describing the data. Thus it becomes necessary to compare the fulfillment results of other fitness criterias.

Other criterias to evaluate theoretical model fitness include the incremental fit index. The data analysis indicated that NFI = 0,90 (> 0,90) and TLI = 0,91 (> 0,90) has fulfilled fitness criteria. However, the Adjusted Goodness of fit index (AGFI) = 0,87 indicated that the model's position is marginal when compared to the baseline model.

The third criteria that may used to test model fitness is by comparing theoretcial models with a range of other existing models. The comparison indicates a marginal theoretical model. The CMIN/DF = 2,54 is still too large compared to the required value suggested by Arbuckle (2005) that CMIN/DF values must be close to 1 (< 2). PNFI = 0,64 and CFI = 0,94 have already fulfilled fitness criteria.

The three fitness criterias demonstrate that overall, the theoretical model proposed in the hypothesis still requires improvement. Numerous measures could be taken to seek alternative models. First, re-examine the content factors of the research variables in the measurement model (Hair, et.al., 1998). Among the exogen variables in the theoretical model, expected perceived ease of use may directly influence frequency. Personality characteristics of extraversion may also directly influence intention.
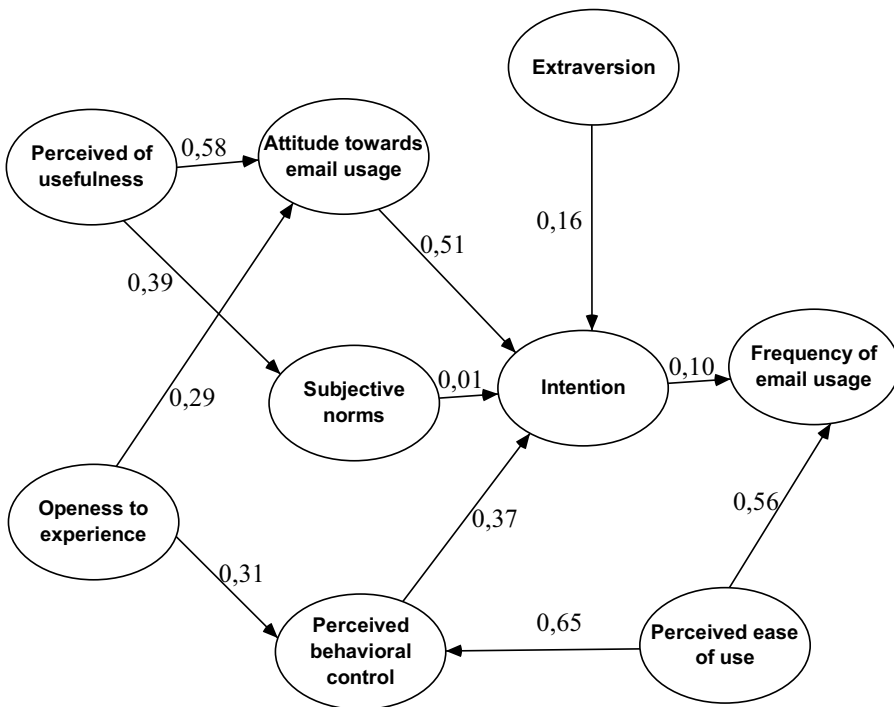
FIGURE 4. THEORETICAL MODEL OF EMAIL USAGE-ALTERNATIVE 1

This revised theoretical model alternative-1 (see Figure 4) has successfully reduced Chi-square values = 68,54 (p = 0,12). Thus, the model of electronic mail use alternative-1, indicates an overall fit. Within the context of electronic mail usage among professors in GMU, the required facilities to use electronic mail is characterized by a form of shared responsibility between institution and the professors. Bandwith, network, electricity, and technicians become the responsibility of the institution. Although computers are largely needed by these professors, from 269 respondents, 247 (91,85%) answered that they use their own personal computers.

In an independent context, where the professor has the choice to use or not use electronic mail, the factor of subjective norms seem to have minor influence ($r^2 = 0,01$), specifically for respondents that are alredy proficient in using similar systems. Compared to subjective norms, perceived ease of using electronic mail largely determines ($r^2 = 0,56$) whether an individual uses or doesn't use electronic mail.

For a comparison, data analysis is also conducted using the theory of planned behvior (TPB) and technology acceptance model (TAM) to understand electronic mail usage. Tests of structural equational modelling were applied to indicate that

the TPB model related to electronic mail usage has already fulfilled criterias of fitness. With Chi-square values = 35,41 (df = 26) and p = 0,10 therefore it may be concluded that overall, the TPB model is supported by the data. Intention predicts frequencies as much as 43%. Meanwhile variables of attitudes constitute the strongest influence on intention (r^2 = 0,58). Perceived behavior control has adequate influence on intention (r^2 = 0,32). As demonstrated by research model and theoretical model alternative-1, the role of subjective norms is also very weak (r^2 = 0,03). Due to its weakness, it thus becomes plausible to suggest that its influence does not exist at all.

Opposing results were demonstrated in the TAM tests when predicting electronic mail usage. The technology acceptance model that had already been established to predict technology acceptance in North America was tested with GMU professors and resulted in values of Chi-square = 23,81 (df = 10) and CMIN/DF = 2,38. Therefore, TAM is not supported by the data.

Modifications were made by predicting electronic email usage directly from its ease of usage. Based on tests towards research model and theoretical model altyernative-1, it is apparent that perceived ease of use is dominant in determining email usage frequency among GMU professors. Should the TAM include perceived ease of use influence attitudes towards the behavior, in this research perceived ease of email use influences email use frequency. This analysis becomes the primary consideration in revising the TAM. The results of the revision, once again proves that ease of electronic mail usage is a strong predictor in predicting electronic mail usage behaviors.

In seeking for the most accurate alternative model, comparison towards the produced theoretical models are conducted. It was revealed that theoretical model for email usage (as seen in Figure 5 is the best model. Thus, the next question is what roles do personality characteristics of openness to experience contribute to email usage?

From theoretical model of email usage as seen in Figure 5, it may be concluded that there are two ways in explaining the psychological factors that influence individuals in using electronic mail:

For individuals that have acuired internet related competence, specifically for electronic mail, when they are aware of the ease of electronic mail usage systems, they would directly use it for supporting their work.

For individuals with a higher degree of openness to experience but incompetent in matters related to electronic mail: Explanations about the perceived ease of use, in addition to email use training, may form a positive attitude towards electronic mail. This positive attitude will further encourage an individual to fulfill expectations of the people he/she appreciates through email. Should the individual feel that the electronic mail system is easily used, thus he/she would feel confident, willing to give effort, competent in managing the range of

barriers that may hamper electronic mail usage. Positive attitude and the presence of perceived behavior control raises intentions for electronic mail usage although the people most influential to the individual does not expect them to use the system.
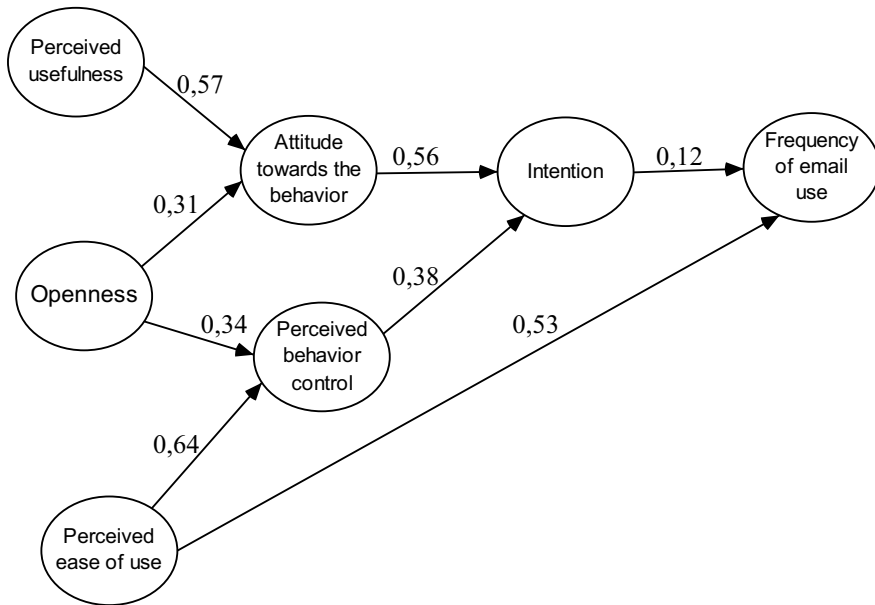
FIGURE 5. THEORETICAL MODEL OF EMAIL USAGE

CONCLUSSIONS

Based on the results we could draw the following conclusions:

- The theoretical model proposed in the hypothesis is not supported by the data
- The openness to experience dimension has larger predictive power compared to extraversion in predicting email usage
- The ease of using email systems plays an important role in determining email usage among professors in GMU.

The theoretical model of email usage (Figure 5) is a much more complete model, because it includes personality and perceived control variables in predicting email use among GMU professors.

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STUDENTS' CONCEPTS OF INTELLIGENCE: PROTOTYPES AND IMPLICIT THEORIES

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Abstract. *This study is based on the pioneering work of U. Neisser (1979) and R. Sternberg et al. (1981) on understanding the everyday conceptions of intelligence. In an initial phase, undergraduate students were asked to list the characteristics of an intelligent person and the aspects of cognitive gender differences. A second group of students rated the descriptions derived from the first group in terms of characteristics, on a scale from 1 to 7. Finally, a third group of students sorted the 60 descriptors with highest mean ratings into larger categories. The results confirmed the ideas of Sternberg et al. about the complex structure of implicit theories and revealed a high level of meaningfulness. A theoretical account of the results is offered and the importance of studying implicit theories of intelligence is highlighted.*

Keywords: *intelligence, prototypes, implicit theories*

INTRODUCTION

Despite long-lasting efforts in studying and defining intelligence, it remains a controversial issue with a lack of consensus in the field (Sternberg, 1985a). After decades marked by psychometricians' attempts to define the concept by measuring it, there came the breakthrough analysis of Ulric Neisser (1979). Considering the lack of consensus on the nature of the concept, he was pessimistic about the possibility that intelligence would ever be explicitly defined, "not only because of the nature of intelligence but also because of the nature of concepts" (p. 217). Neisser's intuition was that what Eleanor Rosch and her colleagues (Rosch et al., 1976) discovered about the structure of the natural categories was applicable to the concept of the *intelligent person.* Neisser called the categories to which Rosch's analysis is valid 'Roschian', to designate "absence of decisively defining fea-

tures" and "existence of 'best' or 'prototypical' instances as well as marginal ones" (p. 219). He further stated that,

Our confidence that a person deserves to be called 'intelligent' depends on that person's overall similarity to an imagined prototype, just as our confidence that some object is to be called 'chair' depends on its similarity to prototypical chairs ... Two people may both be quite intelligent and yet have very few traits in common – they resemble the prototype along different dimensions. Thus, there is no such quality as *intelligence*, any more than there is such a thing as *chairness* – resemblance is an external fact and not an internal essence ... It is a resemblance between two individuals, one real and the other prototypical (pp. 219-223).

Neisser also claimed that psychometricians' attempts to measure a quality, where conceiving resemblance would be more appropriate, have led to the formation of a new prototype,

... of someone who scores high on tests ... What the test measure, then, is the testee's resemblance to a prototypical intelligence-test smartie who would get all the items right." ... [The correlation with school and other academic enterprises] convinces the psychometrician that the test is indeed measuring similarity to the proper prototype .... [Thus,] "unfortunately,... the success of the tests has led to the establishment of two prototypes where there was only one before." (pp. 224–225).

Neisser was probably the first to propose the idea and give anecdotal examples of asking students to list the characteristics of *the intelligent person*. However, it was Robert Sternberg and his associates (Sternberg et al., 1981) who provided the first systematic data in this direction, testing Neisser's ideas empirically. Sternberg et al. conducted a series of experiments aiming to unravel *implicit theories* of intelligence. They defined the latter as "constructions of people (psychologists or laypersons) that reside in the minds of these individuals" (Sternberg et al., 1981, p.37). Discovering implicit theories is important because "[m]ost assessment and training of intelligence in real world are based on implicit rather than explicit theories of intelligence" (p. 38). Moreover, even psychologists tend to trust their implicit theories more than they do measurements based on explicit theories.

In order to collect data about people's beliefs about intelligence, Sternberg et al. asked 186 subjects to list behaviors characteristic of intelligence, academic intelligence, everyday intelligence, or unintelligence. In a second phase or their research, laypersons and experts in the field of intelligence rated a list of 250 behaviors (170 for intelligent and 80 for unintelligent behaviors) on a scale from 1 to 9. Students were excluded from the study because they were found to give substantially different answers from non-student groups. Factor analyses showed very similar, although not identical, structures for laypersons and experts of the ideally intelligent person. The three factors extracted were *Problem Solving*, *Verbal Ability*, and *Social Competence.*

One important finding was that one's self-perceived correspondence to the prototypes for each of the three kinds of intelligence was positively correlated to IQ score. In a third experiment, Sternberg et al. designed imaginary profiles of persons with verbal descriptions of behaviors loading highly on one of the three factors. The results proved that people indeed tended to use these behaviors to evaluate other people's, as well as their own, intelligence. Hence, "knowledge of a person's implicit theory can be used to predict that person's evaluations of both him or herself and others" (Sternberg et al., 1981, p. 53)

The structure of implicit theories extracted by Sternberg et al. (1981) was not, however, unequivocally accepted. While agreeing on the presence of prototypes, Joseph Fitzgerald and Steven Mellor (Fitzgerald & Mellor, 1988) suggested that the nature of implicit theories might in fact be much simpler. One major objection was that Sternberg et al. "analyzed 98 variables using 28 subjects, a 4:1 ratio where a 1:5 ratio is typically employed. Fitzgerald and Mellor replicated the study with a total or 192 subjects and a list of 65 items (40 for intelligent and 25 for unintelligent behaviors), selected from Sternberg et al.'s list, according to criteria of representativeness for each factor in their study. The results showed no meaningful solution but instead an arrangement of the factors along an importance dimension. In a second study, Fitzgerald and Mellor used a free sorting technique. They extracted a two-dimensional space. However, only one dimension accounted for the distance between behaviors: the "unintelligent versus intelligent" one. Thus, Fitzgerald and Mellor's results suggested that implicit theories of intelligence are much simpler than Sternberg et al. had inferred, and bore "faint resemblance to most formal theories of intelligence" (p.153). In fact, data fitted best Spearman's theory of *g*. Fitzgerald and Mellor concluded that laypeople most likely differ in the degree of differentiation of their implicit theories of intelligence, which is affected by the data available to them in their everyday observations of their and other people's intelligent behaviors.

Since these first theoretical and empirical accounts were given, a number of studies on the issue have been conducted. Two important directions in the field are worth mentioning. One is the cross-cultural study of the organization of intelligence-related concepts. Grigorenko et al. (2001) found two latent structures amongst the Luo people in rural Kenya: social-emotional competence and cognitive competence. Only indicators of cognitive competence correlated with scores on conventional Western cognitive ability tests and with school achievement in English and mathematics. Swami and his colleagues, in comparing American, British and Malaysian undergraduates' beliefs about intelligence reported a common factor structure, but significant differences between groups on mean factor scores (Swami et al., 2008). Lim, Plucker, and Im (2003) found that Korean adults emphasized social skills in implicit intelligence theories to a greater degree than Americans and several other Asian samples studied previously. However,

when asked to use their implicit theories to evaluate the intelligence of hypothetical profiles, Korean adults' implicit theories looked surprisingly similar to that of previously studied American samples. In summary, studying implicit theories across cultures would help understand specific values which each culture shares about intelligence, along with more universally shared beliefs.

Another important direction in recent research on implicit theories of intelligence concerns their impact on adolescents' performance and goal-orientation. This type of research is based mainly on Dweck's social-cognitive theory (Dweck & Leggett, 1988), which distinguishes between two types of implicit theories: the belief that intelligence is malleable (incremental theory) and the belief that intelligence is fixed (entity theory). Considerable empirical evidence exists that holding the incremental theory predicts an upward trajectory in achievements during school years, while holding the entity theory predicts a flat trajectory (Blackwell et al., 2007). Even in adulthood, incremental theory predicts striving for improvement (mastery goals) instead of superficially demonstrating competence (performance goals) (Dupeyrat & Mariné, 2005). It is suggested that such theories can be taught during school years (Da Fonseca et al., 2004), or even during therapy (Da Fonseca et al., 2008) which is expected to have a beneficial effect on people's motivation to make an effort. Some of the results from manipulating implicit theories, however, prove controversial (Burns & Isbell, 2007). This poses the question of teachers' responsibility over children's implicit theories, especially in light of findings that teachers have a considerable impact on their pupils' self-perception as learners (Pretzlik et al., 2010).

The aim of the present study was to collect data about implicit theories of intelligence in the Bulgarian culture. In contrast to Sternberg, we considered it important to explore the structure of students' implicit theories, given the importance of the issue during transition from adolescence to adulthood. One subgoal was to shed some light on the Sternberg-Fitzgerald discussion over the structure, complexity and meaningfulness of implicit theories of intelligence. In other words, would students' implicit theories be simple, organized along a single dimension, or more differentiated? A final goal was to search for a formal theory which could account for the results.

METHOD

The study was divided in three phases. In Phase 1, data was collected by students freely generating lists of characteristics describing the intelligent person. These were then compiled into a master list. In Phase 2, these characteristics were evaluated by other students. In Phase 3, the 60 descriptions with the highest mean scores were sorted by a further group of participants in search of the categories underlying the data.

Phase 1: Collection of items.

Similarly to Neisser (1979) and Sternberg (1985b; Sternberg et al., 1981), the main purpose of this phase was to collect a list of characteristics of 'the intelligent person'.

Participants

Data was collected in three consecutive years, making a total of 113 students, including 73 undergraduates in psychology (59 female, 14 male) and 40 undergraduates from the Faculty of Geology and Geography of the same university (30 female, 10 male), from now on referred to as 'GGF students'.

Materials and procedure

Participants were asked to list all the characteristics of an intelligent person, as they themselves perceived them. They were asked not to refer (at least not consciously) to their knowledge of psychological theories of intelligence. It was stressed that they are asked for *their own* opinion. Participants were also asked to indicate whether they thought that sex differences in cognitive abilities existed. No time limits were set. Most of the participants completed the task within 10-15 minutes.

Results

Wording frequencies. It was immediately obvious that some words were used more frequently than others. To further explore this finding, frequencies of used words were counted for both GGF and Psychology students. After eliminating words not adding to semantics (such as prepositions), the correlation between the responses of the two groups was found to be 0, 495, p<0,001. Not surprisingly, some of the most frequently used words were "erudition", "knowledge" and "competence[1]".

Frequencies by categories. A preliminary categorization of the descriptions was made in order to organize the raw data. The categories included some labels traditionally associated with intelligence, such as "erudition", "verbal skills", "analytical thinking", "rationality", and "adaptation", but also others which have only recently appeared in psychological theories of intelligence, such as "motivation", "interpersonal relationships", "intrapersonal understanding" and "emotional regulation", as well as labels not commonly found in explicit theories at all: appearance and health. The five most frequent categories for GGF students were Erudition, Thinking, Social Competence, Personality, and Motivation. For psychology stu-

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[1]   The study was conducted in Bulgarian language. The English translations given
       in the text may not perfectly reflect the meanings in Bulgarian.

dents these were Social Competence, Erudition, Motivation, Creativity, and Adaptation. Correlation between frequencies of categories was 0,758, p<0,001.

Sex Differences in cognitive abilities

Although the details of the participants' opinions regarding gender differences are beyond the scope of this report, the general tendencies are worth mentioning. From a total of 113 subjects, 35 gave a negative answer (corresponding to no gender differences), while 78 gave a positive answer. A chi-square test showed no significant differences by sex or group. In spite of empirical findings that cognitive gender differences are disappearing (Feingold, 1988), the majority (68%) of participants still felt that differences existed. Most of the gender differences mentioned corresponded to frequently repeated stereotypes, such as better spatial orientation for males and better understanding of emotions for females. Spatial orientation was a somewhat surprising point of distinction, in light of the general descriptions of the intelligent person, where only one participant listed this aspect as an important characteristic of intelligence. A final interesting observation was that several participants rated one gender as generally smarter than the other.

CONCLUSIONS

The observed frequencies demonstrated two interesting tendencies. First, along with categories traditionally included in psychological theories and intelligence tests, other categories, not commonly found in these, were also present. This suggests that students' conceptions of intelligence differ in some respects from explicit psychological theories, although at least a part of the subjects (i.e. the psychology undergraduates) might have been influenced by them. Second, the frequencies of word usage and categories of descriptions were significantly correlated between the two groups. It seems therefore that implicit theories are not particularly group-specific, at least at the level of students' sub-groups. This justified pooling together the data from the two groups. After eliminating obvious repetitions, a total of 196 descriptions of behaviors, personality traits, and attitudes were compiled into a master list of the intelligent person's characteristics.

Phase 2 Ratings of the collected items

The aim of this phase was to explore the underlying structure of the students' implicit theories of intelligence. A central issue of interest was whether items would be grouped by semantics as in Sternberg at al.'s (1981) study, or rather by importance as in Fitzgerald and Mellor's (1988). Consequently the technique used was the same as in their studies.

Participants

The study involved a total of 145 participants (128 female, 28 male, 9 no data): 132 were undergraduate students in pedagogy (28) psychology (65) and philology (39); there were also 13 graduates.

Materials and procedure

Participants had to rate the 196 descriptions from the master list compiled in phase one. The order of item presentation was counterbalanced by rearranging the sheets of the questionnaire in five different ways following the Latin square method. Subjects had to rate all descriptions on a Likert scale from 1 (not at all typical) to 7 (most typical).

Results

A factor analysis was performed for a direct comparison with previous studies (Fitzgerald & Mellor, 1988; Sternberg et al., 1981). An initial solution plot showed that 5-factor structure should be most convenient for the results. The five factor structure accounted for 43,67% of the total variance explained, and 15, 12, 8, 4, and 4% for each consecutive factor.

The first factor includes descriptions such as 'Responsible', 'Thinks not only about herself', 'Tolerant', 'Wants to live in harmony with others', 'Keeps his word', 'Balanced'. 'Having a good approach to others'. This factor was labeled *Interpersonal virtues.*

The second factor includes mainly items describing behaviors such as 'Finds easier ways to solve difficult problems', 'Makes inferences about what he doesn't know on the basis of the facts that he knows', 'Thinks flexibly', 'Able to predict the outcomes of diverse situations', 'Able to analyze all kinds of events', and 'Easily transfers his abilities from one domain to another'. This factor was labeled *Problem solving skills*, as its contents reflects almost literally respective characteristics listed in cognitive psychology textbooks.

The third factor includes descriptions such as 'Good position in society', 'Having a prestigious job', 'Solves IQ-test fast', 'Ordered', 'With considerable technical skills', 'Hard-working', 'With considerable achievements in the academic domain'. It was tentatively called '*The Psychometrician's prototype*'. The prototype suggested here is one of the 'smartie' scoring high on IQ-test, which in turn predicts his well-being in society and professional realization.

The fourth factor was labeled *Sensitivity and broadness of interests.* Some of the descriptions with highest scores on this factor are 'Sensitive', 'Emotional', 'Generous', 'Having vivid imagination', 'Keen on discovering and travelling', 'Willing to help other people', 'Listening to nice music', 'Not a traditionalist', 'Brave', 'Having a creative approach', 'Proud', 'With a well-developed flair and intuition'.

Finally, some of the most characteristic descriptions for the factor were 'Having much knowledge beyond his professional domain', 'Literate, with high verbal competence', 'With a rich vocabulary', 'Knows and reads on all the issues that arouse his curiosity', 'Having a good general knowledge, erudite'. This factor was labeled *Crystallized intelligence, erudition and verbal fluency*.

Inter-group comparisons by Factors.

One-way ANOVAs were performed in order to check for inter-group differences on ratings. No significant main effect of order of presentation of the items over the participants' responses was found. A general tendency was observed for the graduate group to assign significantly lower ratings than each of the three groups of students; F (3, 141) = 3,68, p<0,05. This tendency was reflected in significantly lower rating only on factors One (Interpersonal virtues) and Four (Sensitivity and broadness of interests). The overall order of ratings for the graduate group is the same as for the other groups (the most important factor overall being *Problem solving skills*), so there is no evidence to justify conclusions about significant differences in the structure of the different groups' conceptions. Furthermore, no significant differences between the sub-groups of students were found. Overall, female subjects rated items from factor one (Interpersonal virtues) significantly higher than males; Tukey's HSD = 13,95, p<0,05.

CONCLUSIONS

In order to replicate findings from previous studies (Fitzgerald & Mellor, 1988; Sternberg et al., 1981), data from phase One was compiled into a master list of descriptions which was given to another group of participants who had to rate each description from 1 to 7. A five-factor solution best fitted the data. The amount of variance explained by the 5-factor solution (about 44%) is comparable to that reported by Sternberg et al. (1981) and considerably higher than the one reported by Fitzgerald and Mellor (1988).

The factors Factor analysis of data extracted were called *Interpersonal virtues Problem solving skills*, *Psychometrician's prototype*, *Sensitivity and broadness of interests*, *and Crystallized intelligence, erudition and verbal fluency*. First, second, and fifth factors resemble very closely those cited by Sternberg et al. (1981). Fitzgerald and Mellor (1988) cited two more factors not reported by Sternberg and his colleagues, *Interest in Learning and Culture*, and *Character*. Despite the insufficient information about them, it seems that factor 4 in this study, Sensitivity and broadness of interests, may be considered a compilation of these two factors. The remaining factor 3 combines descriptions traditionally used to describe the mental skills, as well as the appearance of the intelligent person. Items about appearance were not cited in the reviewed studies,

but the frequency of their use in the free descriptions makes it worth to think of intelligence not only as something 'within', but also of its apparent (perhaps sometimes misleading) manifestations, in line with Neisser's insight of conceiving intelligence as resemblance rather than quality. In fact, the third factor appeared quite similar to what Neisser suggested as having resulted from pscychometricians' efforts: namely the formation of another prototype, 'the IQ-test smartie'. It needs further exploration, however, whether this is indeed a consequence of wide-spread intelligence testing, or there are some other possible explanations.

Except for an overall tendency for the graduates to give lower ratings, no significant differences were found between subgroups of participants, which can be treated as an indication of the homogeneity of the data.

In summary, it seems that the extracted factors reflect a meaningful structure rather than a rating of importance. At this stage, therefore, it seems that data fits Sernberg et al.'s suggestions of complex-structured implicit theories, rather than Fitzgerald and Mellors view of simpler, unidimensional implicit models. Nevertheless there remained about 60% of unexplained variance, which is unsurprising given the subjects-items ratio. The results cannot consequently be considered as a decisive evidence of structure. For this reason, a final phase of the study was designed to verify the findings by using the free sorting technique, suggested by Fitzgerald and Mellor (1988).

Phase 3. Sorting of Items having highest score

Participants

Forty six undergraduates in psychology (34 female, 12 male, 1 no data) and one assistant professor, female, took part in the task, in four different settings.

Materials and Procedure

The sixty descriptions with the highest mean ratings from Phase 2 were printed on 60 separate cards. Each participant was given a set of 60 cards, numbered from 1 to 60. Subjects had to sort the cards in at least two and at most 59 categories. Every card had to be sorted, and only once. Participants were unaware of the origin of the descriptions and of the purposes of the task.

Results

Data was converted into similarity matrix on the basis of co-occurrence of items. A cluster analysis of the proximity matrix (Ward's method, over Pearson's r) was conducted. Figure 1 shows a dendrogram of the results.
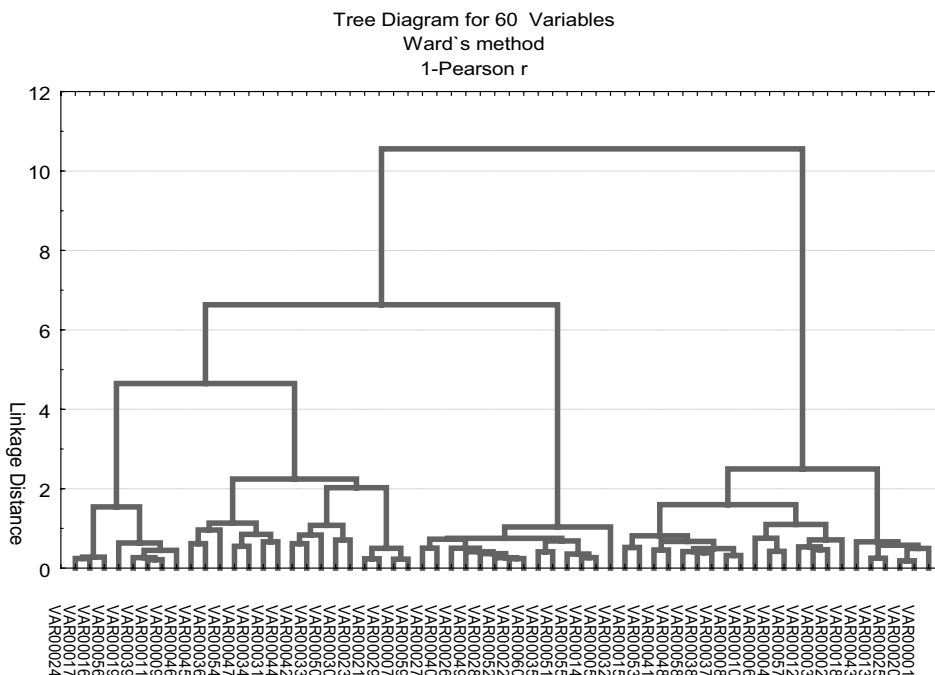
FIGURE 1. CLUSTER ANALYSIS OF THE PROXIMITY MATRIX (WARD'S METHOD, PEARSON R).

The results revealed a surprisingly meaningful hierarchical structure. Four large coherent clusters can be distinguished, with more specific sub-groups. The first cluster contains items such as 24, 17, 16, describing *Erudition*, as well as 56, 19, 39, 11, 9 (*Drive for knowledge*). The second cluster contains items about *Rationality* and *moral judgments* (46, 45, 36, 54, 34, 31), *Goal orientation* and *personal style* (44, 42, 33, 50, 30), and *Intrapersonal intelligence* (23, 21, 29, 7). A large third cluster encompasses items about *Interpersonal intelligence* (social competence). The first two clusters are related to each other and both can be grouped together with the third one at a later stage. The fourth, most distant cluster comprises items about *Originality and creativity* (32, 15, 53, 41, 48, 58, 37, 8), *Analytical* and *Practical intelligence* (10, 6, 4, 57, 12, 3, 2) and *Logical reasoning* (18, 43, 13, 25, 20, 1). This is an almost ideal reflection of a classification that could be made by formal criteria.

CONCLUSIONS

The cluster analysis confirmed the results obtained through factor analysis, giving an even clearer picture of the structure of students' implicit theories. The

sixty most characteristic descriptions of the intelligent person were grouped in a coherent and meaningful, still quite complex, way.

The connection between drive for knowledge and erudition is obvious. Perhaps more interesting is the inter-correlation between rationality, moral judgments, goal orientation, and style. This finding suggests a prototype of the balanced, ever-rational person, who uses his rationality not only to solve analytical problems, but also to make just judgments about moral issues. This in turn is appreciated by others as a sign of a personal style and independence of thought.

Two types of intelligent behaviors, not commonly considered by intelligence theories, but present in the works of R. Sternberg and H. Gardner, are the intra– and interpersonal intelligence, (Гарднър, 2004) or social competence (Sternberg et al., 1981). Once again, this finding shows that implicit theories contain features incompatible with the traditional psychometric model, but which may have a great impact on our judgments about our own, as well as other people's, intelligent behaviors.

One aspect of special interest is the disjunction of thinking skills and rationality, an intuition supported by empirical findings about discrepancies in these abilities (Stanovich & West, 2008). It seems therefore that not all of the students' conceptions are built on stereotypes and myths, as could be inferred from their answers on gender differences. Some of the students' intuitions, and not the most trivial ones by that, reflect empirical evidence, at least in terms of their general structure.

GENERAL DISCUSSION

Students have complex and meaningful implicit theories of intelligence, much more in the spirit of suggestions made by Sternberg et al. than those by Fitzgerald and Mellor. Some of the groups of descriptions extracted (in terms of factors and clusters) resembled very closely Sternberg et al.'s findings. This suggests that beliefs about intelligence in the Bulgarian culture are not too different from those in the United States. The results also revealed some specific features, such as rationality and moral judgments (Phase 3), and more surprisingly appearance (Phase 2), which call for further exploration.

Several models seem to fit with the findings. First, a clear distinction is made between crystallized and fluid intelligence, a distinction suggested by Cattell, (cited in Sternberg et al., 1981, who also suggested the relevance of this model to their data). However, Cattell's theory seems too narrow to encompass the diversity of descriptions and categories included in the students' implicit structures. The analytical, practical, and creative components of intelligence, suggested by Sternberg himself (Стърнбърг, 2002), appear only as a component within a larger cluster. Some of Gardner's multiple intelligences (Гарднър, 2004), and not only

the more traditional ones, are also well-adopted in the implicit theories. Other types such as the body-kinetic, musical, and spatial intelligences are, however, very scarcely represented or not present at all. It seems that student's concepts of intelligence do not usually include these types of intelligence.

From a more general perspective, Neisser's, idea that two persons can be considered intelligent on the basis of their resemblance to a prototype on different dimensions seems to be justified by the complex structure of the implicit theories. However, Neisser did not make any specific predictions against which to compare our findings.

In order to find the best-fitting model it may be useful to broaden the context, which may lead to something surprisingly familiar in the domain of personality theory. Apparently, some of the factors and clusters extracted are very close to several of the "Big-Five"-traits. Factor 1, Interpersonal virtues is very similar to Agreeableness. Factor Four, Sensitivity and broadness of interest is quite like Openness to experience, and there is also some resemblance between Factor 3 and Conscientiousness. This finding is reflected in the cluster analysis which separated what are clearly cognitive skills from what seem to be descriptions associated with personality. Is it that students' answers imply that some aspects of intelligence are indiscernible from personality? Or is it a superficial similarity? Further work is needed to answer this question in search for new evidence.

Aknowledgements

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SOCIAL, EMOTIONAL, AND COGNITIVE SKILLS OF INSTITUTIONALISED ABUSED CHILDREN

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Abstract. *This article describes a pilot study that aimed to assess and compare social, emotional and cognitive skills within a group of institutionalized abused children, a group of abused children placed in foster care and a group of children living with natural families. The assessment presented in this study was made in order to further test the effectiveness of the YCDI program (You Can Do It Education) developed by prof.Michael Bernard from Melbourne University Australia, whose assessment procedure was used.*

Keywords: *abused children, socio-emotional skills, institutionalized children, foster care, attachment disorders*

INTRODUCTION

In Romanian Child Welfare System, the role of residential institutions is to ensure the protection and development of children, temporary or permanently separated from their parents. At the end of 2008, in Romania, there was a number of 45228 children placed in residential institutions (24427) and foster care (20801).

Infants, children and young people who have been removed from their parents care, by social services, because of abuse or neglect and placed in protective care are known to have a high incidence of mental health problems (Milburn, Linch&Jackson, 2008). Problems that were present before entry into care become compounded by problems arising in response to the experience of being in care. Issues within the mental health and protective care systems, including lack of residential stability, mental health service waiting lists, and few resources for on-going psychotherapeutic work, combined with lack of parental advocates, often prevent or delay appropriate assessment and treatment of mental health problems (Arcelus, Bellerby, & Vostanis, 1999; Barber, Delfabbro, & Cooper, 2001).

MENTAL HEALTH NEEDS OF LOOKED-AFTER CHILDREN

Mental health problems of children in care are found across the full spectrum of social and emotional functioning, including developmental delay (Leslie, Gordon, Ganger, & Gist, 2002; Reams, 1999), behavioural disturbance, particularly conduct disorder (Callaghan,Young, Pace, & Vostanis, 2004), mood disorders (Arcelus et al., 1999), post traumatic stress (Lieberman & van Horne, 1999; Perry, Dobson, Schick, & Runyan, 2000) and disorders of attachment (Hodges, Steele, Hillman, Henderson, & Neil, 2000; Minnis, Pelosi, Knapp, & Dunn, 2001; Zeanah, Heller,Valliere, Hinshaw-Fuselier, Aoki, & Drilling, 2001). Long-term outcome for children in care has also been found to be significantly compromised when compared to children living with their families. Difficulties have been found both at the point of entry into the care system (e.g. Dimigen, Priore, Butler, Evans, Ferguson, & Swan1999 ; Hochstadt, Jaundes, Zimo, & Schacter, 1987;) and after having been in care for some time (e.g. (Arcelus et al., 1999; Blower, Addo, Hodgson, Lamington, & Towlson, 2004; Callaghan et al., 2004). Many researchers have found more than half their sample meet criteria for a major mental health diagnosis (Kenrick, 2000), while other researchers have found up to 100 percent (Lieberman & van Horne, 1999). Children in out-of-home care have also been found to be generally more aggressive and less empathic than their peers not in care (Pilowsky, 1992).

Furthermore to the initial symptoms caused by traumatic factors, presented at the time of establishing the measure of placement often overlaps a new types of symptoms due to adaptation process in the new environment, or to repeated changes of primary caretaker which disable them to form stable relationships of attachment with the caretaker.

One of the more complex caregiving environments in which children attempt to adapt and survive is one in which there is both abuse and neglect. Physically abusive and emotionally rejecting environments, although highly stressful, are nevertheless predictable and relatively consistent. Children develop a range of adaptive strategies in these environments broadly around the themes of deactivating their attachment behaviour, compulsive compliance, suppression or denial of affect, power and aggression (Crittenden, 1995).

In abusive environments, children can develop cognitive understandings of what is expected of the self, others, and the rules of relationships, but being defended against affect, their levels of emotional literacy remain poor and they are typically low on empathy. In attachment terms, although this is an insecure (avoidant) pattern, by deactivating their attachment behaviour, children nevertheless begin to organize their behaviour, emotions and cognitive appraisals in an attempt to maximize safety and parental availability.

In contrast, neglectful environments are less predictable. Here parents tend to be underinvolved and respond inconsistently to signals of distress. Although

neglect covers a range of parenting styles, there is a tendency at the milder end for children to increase the availability of an underinvolved, unresponsive caregiver by increasing their signals of distress. Again, this strategy involves some psychological organization as attachment behaviour becomes increasingly hyperactivated. However, as carers are basically inconsistent, children are unable to make predictions. Many children find themselves in caregiving environments in which there is both abuse and neglect, danger and unpredictability. Moreover, if the infant's attachment figure is the cause of his or her fear and distress, it is very difficult to organize an attachment strategy which increases either feelings of safety or the availability of the carer. Fear activates attachment behaviour which is designed to get the child into close proximity with the attachment figure. In the arms of the attachment figure, the child normally would expect to feel safe, comforted and emotionally contained and regulated. But if the attachment figure is the source of the fear, distress or confusion, the child is presented with a psychological dilemma. The child experiences simultaneous feelings of escape and approach which cannot be resolved. Having experienced the caregiver as a source of both danger and reassurance, there occurs a major disturbance in the balance between fear and attachment, leading to attachment-disordered behaviours (Fischer– Mamblona, 2000) – that is, fright without solution. The child cannot organize an attachment strategy to increase feelings of care and protection – hence the behaviour is described as disorganized or disoriented. For example, in the presence of their caregiver, distressed infants might freeze, display headbanging, or show confused avoidance/approach behaviours.

Disorganized attachments in infancy are commonly observed in children whose carers are physically and/or sexually abusive, severely neglectful, heavy abusers of alcohol and/or drugs, chronically depressed, disturbed by unresolved feelings of loss and/trauma, the victims of domestic violence, or any combination of these. In the caregiving environments generated by these parents, children can find no strategy that enables them either to feel safe or regulate their emotionally hyperaroused states. Moreover, children in such parent–child relationships find it difficult to develop an integrated sense of self. 'Mentalization', defined as the organization of the representation of one's own and others' behaviour in terms of mental states, is not fully developed in severely maltreated and traumatized children. Children whose attachment behaviour is classified as disorganized in infancy are at the greatest risk of developing maladaptive behaviours and mental health problems (Cicchetti, Toth, & Hennessy, 1989).

However, with maturation, disorganized children develop overlays of organization based on one or more controlling strategies. For example, children whose parents are rejecting and physically abusive, as we have seen, often develop compulsively compliant, affect suppressed, power-sensitive behaviours which might see them subdued and wary in the presence of their abusive parents, but aggressive and bullying in relationship with weaker siblings and peers.

TABLE 1. CLINICAL SYMPTOMS OF ATTACHEMENT DISORDER

Behavioural:

- lack of impulse control;
- self-destructive behaviours;
- destruction of property, including own and other people's favourite and precious objects;
- verbal and physical aggre ssion towards others, particularly family members ('You all hate me and I hate all of you and I'm going to cut off your heads!');
- stealing(e.g. from mother's purse));
- 'crazy', obvious lying;
- inappropriate sexual conduct and attitudes;
- cruelty to animals;
- preoccupation with fire, blood, gore,evil and weapons, often expressed in violent play and drawings;
- sleep disturbance;
- enuresis and encopresis;
- oppositional defiant behaviours;
- hyperactivity, restlessness, constant need for stimulation and activity that often leads to antisocial behaviours;
- children act as if their new carers were responsible for their past abuse and hurt
- constant blaming of others;
- self-endangerment.

Emotional:

- intense displays of anger, rage d and even violence towards
carers, particularly female carers (adoptive mothers, foster carers);
- episodes of inconsolable sadness, helplessness and depression;
- inappropriate emotional responses (e.g. laughing in public at at at someone else's misfortune);
- marked mood changes;
- inappropriately demanding or clingy;
- resentment.

Cognitive functioning:

- lack of cause-and-effect thinking (they do not feel responsible for their choices and actions, preferring to blame others);
- perceive themselves as unwanted, bad, sometimes helpless and sometimes supernaturally and powerfully dangerous;
- perceive their carers as unavailable, hostile and unloving.

Social:

- superficial and charming with strangers;
- little eye contact;
- poor peer relations;
- fight for control over everything (control battles);
- bossy;
- relate to others in a manipulative, controlling and exploitative fashion (e.g. borrow things and either lose, sell or keep them);
- lack of remorse or conscience for harm or hurt caused.

Physical and developmental:

- poor personal hygiene and self-neglect;
- confusion over own physiological states (e.g. get mixed up about being hungry or full, hot or cold, wet or dry);
- abnormal eating patterns (gorging, stealing food, hoarding, refusing to eat – particularly in the presence of other family members);
- body tension;
- accident prone;
- high pain tolerance/overreaction to minor injury;
- dislike of being touched ('Don't touch me!').

Other children might experience their carers as needy, and unable to care or protect themselves never mind their children. For young children, this is frightening. Carers whose own needs are greater than those of their children include those who are the victims of domestic violence, addicted to alcohol or drugs, suffer major depression, or feel helpless under stress and states of unresolved trauma. One way for children to establish a relationship with such carers is to worry about and care for the vulnerable parent in acts of compulsive caregiving, also known as 'parentified behaviour' or role reversal. These are anxious, stressed children who try to maintain a false, brittle cheerfulness, constantly fearing the loss of their parent, if not physically, then emotionally and psychologically.

CHILDREN WITH DISORDERS OF ATTACHEMENT

Many abused, rejected and neglected children who have developed adaptive strategies based on control, avoidance and arrested affect eventually join new families. However, they bring with them the fearful–aggressive controlling behaviours developed in their early years (Howe&Fearnley, 2003). These children place great demands on new carers. Their placements run a high risk of getting into major difficulties. When parents eventually do refer themselves and their children for help, the symptoms shown by the children are highly characteristic and include many of, if not most of the following: (Fearnley, 2000; Keck & Kupecky, 1995; Levy & Orlans, 1998)

These symptoms are now receiving interesting explanations by attachment researchers and a number of developmental neuroscientists. In particular, Schore (1996) is providing fascinating insights into how young minds form in the context of close caregiving relationships, including those in which infants experience severe stress and trauma. Not only is the infant brain a selforganizing developmental structure, many of the key components of organization and early 'hard-wiring' occur in the context of the child's relationship with his or her attachment figure. According to Schore, the 'social construction' of the human brain is explained by the fact that the period of brain growth spurt up to about the age of 24 months exactly overlaps the period of the child's early forming attachment. Thus, the central thesis of Schore's work on affect regulation and the origin of the self is that the early social environment, mediated by the primary caregiver, directly influences the final wiring of the orbitofrontal cortex that is responsible for the future socio-emotional development of the child. Schore (2000) observes that the adaptive capacity to selfregulate one's social and emotional behaviour 'emerges out of a history of secure attachment interactions of a maturing biological organism and an early attuned social environment. The infant's capacity to deal with stress therefore depends on the ability of the carer to recognize, understand and respond appropriately to the child's internal mental states. Schore calls this 'co-

regulation'. And out of regular experiences of co-regulated interaction, securely attached children learn how to self-regulate. This gives them the ability flexibly to regulate their own emotional states through interaction with others, which in turn forms the basis of good 'theory of mind', sound mentalizing capacities, resilience, social competence, and high reflective function

Disorders of attachment represent failures by the caregiver to help young children regulate their arousal and affect. Schore (2001) identifies links between severe attachment failures, the neurobiology of trauma, the neuropsychology of disorganized attachments associated with abuse and neglect, impairments in early development of the right brain's stress coping systems and psychopathology. He calls this 'relational trauma' in which the condition or conduct of the carer herself leaves the child in a highly stressed, unregulated, unrepaired state. Indeed, the attachment relationship itself is often the direct cause of children's hyperaroused states, which, if they go 'unrepaired' by the carer, prelude future psychopathology. If children are not helped to regulate their minds when they are in highly aroused states, which is the case in situations of abuse and neglect, the adverse developmental consequences are far-reaching (Perry & Pollard, 1998).

Disorders of attachment describe dysregulated young minds in interaction with misattuned, non-reflective, frightening carers. And because emotions and physiological states are highly interconnected at both the neurological and developmental level, they can bypass the cortex and consciousness. Traumatic relational experiences can therefore be remembered physiologically and emotionally but not necessarily consciously (LeDoux, 1998). In the case of maltreated children, they can react by suddenly switching, for no apparent reason – and certainly none of which they are consciously aware – among states of happiness, fear, anger and despair. All of this can be highly confusing to new carers.

STUDY PURPOSE

This article describes a pilot study that aimed to assess and compare social, emotional and cognitive competences within a group of institutionalized abused children, a group of abused children placed in foster care and a group of nonabused children living with natural families. The assessment presented in this study was made in order to further test the effectiveness of the YCDI program (You Can Do It Education) developed by prof.Michael Bernard from Melbourne University Australia, whose assessment procedure was used.

The hypothesis for this study were as follows:

1. institutionalized abused children have deficits at the level of socio-emotional skills, which are more obvious compared with children placed in foster care;

2. the level of development of socio-emotional competences of children placed in foster care is close to that of children living with natural families.

METHODOLOGY

To evaluate socio-emotional skills was used the assessment procedure from the YCDI program (You Can Do It Education) designed by Prof. Michael Bernard.

SURVEY DESIGN

The procedure involves five data sheets designed to assess the dimensions considered essential for social and emotional skills. According to Michael Bernard B. (2004a, 2006)., the dimensions are:

a. Confidence: means knowing that you will likely be successful at many things. It means not being afraid to make mistakes or to try something new. Accepting Myself. Not thinking badly about yourself when you make a mistake. Taking Risks. Thinking that it's good to try something new even though you might not be able to do it. Being Independent. Thinking that it's important to try new activities and to speak up even if classmates think you're silly or stupid.

b. Persistence means trying hard and not giving up when schoolwork feels like it's too difficult or boring. I Can Do It. Thinking that you are more likely to be successful than you are to fail. Giving Effort. Thinking that the harder you try, the more successful you will be. Working Tough. Thinking that in order to be successful in the future, you sometimes have to do things that are not easy or fun in the present.

c. Organization means setting a goal to do your best in your school work, planning your time so that you are not rushed, having all your supplies ready, and keeping track of your assignments' due dates. Setting Goals. Thinking that setting a goal can help you be more successful at a task. Planning My Time. Thinking about how long it will take you to do schoolwork and planning enough time to get it done.

d. Getting Along means working well with teachers and classmates, solving problems without getting too angry, and following the rules of the classroom. Being Tolerant of Others. Not making overall judgments of people's character based on their differences or behavior. Thinking First. Thinking that when someone treats you badly, you need to think about different ways you can react and the impact of your actions on the other person's feelings. Playing by the Rules. Thinking that by following important school

and home rules, you will live in a better world where everyone's rights are protected. Social Responsibility. Thinking that it is important to be caring, honest, and respectful, a good citizen, and to help build a world with fairness and justice for all.

e. Emotional Resilience means knowing how to stop yourself from getting extremely angry, down, or worried when something "bad" happens. It means being able to calm down and control your behavior.

STUDY SAMPLE

The sample consist in a total of 39 children, aged 3-7 years who were selected as follows:

- 13 abused children placed in residential institutions for at least 1 year
- 13 abused children living with foster parents for at least 1 year
- 13 children living with natural families

All children have been tested with RAVEN'S PROGRESIVE MATRICES (cmp PARALLEL SETS A, Ab, B) and all the results indicate that the values of IQ are between 90 and 113

EVALUATION PROCEDURE

Evaluation datasheets were completed by :1. the parents for children living in natural families; 2. the foster parent for children who are placed in foster care and; 3. the caregiver for children living in residential institutions.

The evaluators received clear instructions regarding the procedure for evaluating and rating the items. So they were asked to observe behavioral aspects contained in the five dimensions in a variety of situations, for three weeks. After this, the evaluators were asked to complete the evaluation sheets.

RESULTS

There were analysed the differences between the results provided from assessments of social, emotional and cognitive competences of abused children placed in residential institutions abused children living with foster parent and nonabused children living with their natural families.

For each of the statistical *t*-test procedures used in this study, the alpha level was set at .01. The Statistical Package for the Social Sciences (SPSS) was used for the statistical analysis. Means and standard deviations were established for all variables.

First there were analysed the differences between the results provided from assessments of social, emotional and cognitive skills of children placed in residential care and those living with foster parent:

In comparing average means of CONFIDENCE dimension the results were: children placed in residential center sustained that they intend to engage less in new tasks or in those who are believed that they can not carry out (m=1.61, SD= 0.8) than in those placed within FC (m=2.61, SD= 0.9), t=2.78, df=24, p<0.01; also they tend to engage less frequently in social interactions and maintain less eye contact, and more frequently engage in aggressive behavior (m=1.84 , SD=0.37), compared to children placed with FC (m=3.15, SD=0.68), t= 6.01, df =24, p<0.01.

RegardingPERSISTENCE dimension can be seen that there are statistically significant differences in terms of „working tough" subdimension, so children in residential centers persist in tasks that seem difficult only in adult insistence and under guidance (m=2.00, SD= 0.57) compared to children placed in FC who undertake the task independently without requiring a direct guidance from the adults (m=2.84, SD=0.89), t=2.85, df= 24, p≤0.01.

Regarding „giving effort", were not observed statistically significant differences between groups.

Concerning the ORGANISATION dimension there were observed statistically significant differences in the subdimension of "setting goals" in the sense that children in residential care require in a higher degree constant feedbak from adult (m=1.92, SD=0.75) compared to children placed within FC (m=3.07, SD=0.86) t=3.62, df=24, p≤ 0.01. The dimensions „active listening" and „take care of things", were not significant differences in statistical terms. In subdimension „planning my time" the difference is significant statistically at p<0.05.

In GETTING ALONG dimension, there were statistically significant differences in subscales „conflict management", and „social responsibility", at p<0.05. As a result, children in residential care tend to engage more often in aggressive behaviors to solve conflicts (m=1.92, SD=0.64) compared to children from FC using assertive verbal messages more frequently in conflict situations without the intervention of adults (m=3.00 SD=0.91). Furthermore, children from residential care, frequently engage in destructive behavior without caring for the safety of others (m=2.07, SD=0.86) compared with those within FC (m=3.23 SD=1.01) that are showing an increased interest in maintaining the functional state of the objects around them and the safety of others, without adult intervention.

The biggest differences in statistical terms were recorded in RESILIENCE dimension in subscales „emotional self control" and „outcome self-control", p<0.01: Children in residential care have difficulties in reducing the intensity of negative emotions (m=1.53, SD=0.66) and in behavioral self-regulation in frustrating situ-

ations, even if assisted by an adult (m=1.69, SD=0.48). Children placed with FC and have developed the capacity to manage their emotional reactivity (m=2.92, SD=0.64), and behavioral outcomes (m=3.00, SD=0.81), in frustrating situations without adult support.

Second there were analysed the differences between the results provided from assessment of social, emotional and cognitive skills of children living with foster parent and children living with their natural families:

In comparing the averages of assessment of social, emotional and cognitive skills of children living in natural families and children placed with FC, it can be assumed that there are no significant differences between groups. Although there is a significant difference at p≤0.05, at the subscale regarding „being independent" (mFC=2.61, SDFC =0.96, mNF=3.46, SDNF=0.66) and „take care of things"(mFC=2.53, SD FC=1.05, mNF=3.61, SDNF=0.65).

TABLE 2. RESULTS OBTAINED BY CHILDREN LIVING IN RESIDENTIAL INSTITUTIONS (RI) AND CHILDREN PLACED IN FOSTER CARE (FC).

Diension Dimensions	Variables	N	mean	St. deviation	t	Sig. (2-tailed)
CONFIDENCE						
			Being independent			
	R.I.	13	1,61	.86	-2,78	0,01
			,86 -2,78 ,010			
	F.C.	13	2,61	.96	-2,78	0,01
			Taking risks			
	R.I.	13	1,84	0,37	-6,01	0
	F.C.	13	3,15	0,68	-6,01	0
			Accepting myself			
	R.I.	13	1,76	0,72	-4,99	0
	F.C.	13	3,15	0,68	-4,99	0
PERSISTENCE						
			Working tough			
	R.I.	13	2	0,57	-2,85	0,009
	F.C.	13	2,84	0,89	-2,85	0,01
			Giving effort			
	R.I.	13	2,23	.59	-1,39	0,176
	F.C.	13	2,69	1,03	-1,39	0,179

ORGANIZATION					
		Setting goals			
R.I.	13	1,92	0,75	-3,62	0,001
F.C.	13	3,07	0,86	-3,62	0,001
		Active lis-tening			
R.I.	13	2,07	0,86	-1,79	0,085
F.C.	13	2,76	1,09	-1,79	0,086
		Planning my time			
R.I.	13	1,61	0,5	-3,37	0,002
F.C.	13	2,69	1,03	-3,37	0,003
		Take care of things			
R.I.	13	1,92	0,64	-1,8	0,084
F.C.	13	2,53	1,05	-1,8	0,086
GETTING ALONG					
		Interaction with other kids			
R.I.	13	2,23	0,59	-2,89	0,008
F.C.	13	3,23	1,09	-2,89	0,009
		Playing by the rules			
R.I.	13	1,84	0,68	-3,42	0,002
F.C.	13	3	1	-3,42	0,002
		Conflict management			
R.I.	13	1,92	0,64	-3,48	0,002
F.C.	13	3	0,91	-3,48	0,002
		School positive outcome			
R.I.	13	2,15	0,55	-1,65	0,11
F.C.	13	2,69	1,03	-1,65	0,114
		Social responsibility			
R.I.	13	2,07	0,86	-3,12	0,005
F.C.	13	3,23	1,01	-3,12	0,005
RESILIENCE					
		Emotional self control			
R.I.	13	1,53	0,66	-5,42	0
F.C.	13	2,92	0,64	-5,42	0
		Outcome self control			
R.I.	13	1,69	0,48	-4,97	0
F.C.	13	3	0,81	-4,97	0

TABLE 3. RESULTS OBTAINED CHILDREN PLACED IN FOSTER CARE (FC) AND NONABUSED CHILDREN LIVING WITH NATURAL FAMILIES (NF)

Diension Dimensions	Variables	N	mean	St. deviation	t	Sig. (2-tailed)
CONFIDENCE						
	Being independent					
	F.C.	13	2,61	0,96	-2,61	0,015
	N.F.	13	3,46	0,66	-2,61	0,016
	Taking risks					
	F.C.	13	3,15	0,68	-1,16	0,256
	N.F.	13	3,46	0,66	-1,16	0,256
	Accepting myself					
	F.C.	13	3,15	0,68	-0,277	0,784
	N.F.	13	3,23	0,72	-0,277	0,784
PERSISTENCE						
	Working tough					
	F.C.	13	2,84	0,89	-1,2	0,241
	N.F.	13	3,23	0,72	-1,2	0,242
	Giving effort					
	F.C.	13	2,69	1,03	-0,65	0,522
	N.F.	13	2,92	0,75	-0,65	0,523
ORGANIZATION						
	Setting goals					
	F.C.	13	3,07	0,86	0,92	0,364
	N.F.	13	2,76	0,83	0,92	0,364
	Active listening					
	F.C.	13	2,76	1,09	-0,98	0,337
	N.F.	13	3,15	0,89	-0,98	0,337
	Planning my time					
	F.C.	13	2,69	1,03	-0,65	0,522
	N.F.	13	2,92	0,75	-0,65	0,523
	Take care of things					
	F.C.	13	2,53	1,05	-3,14	0,004
	N.F.	13	3,61	0,65	-3,14	0,005
GETTING ALONG						
	Interactions with other kids					

F.C.	13	3,23	1,09	-0,65	0,521
N.F.	13	3,46	0,66	-0,65	0,522
Playing by the rules					
F.C.	13	3	1	0	1
N.F.	13	3	0,91	0	1
Conflict management					
F.C.	13	3	0,91	-0,23	0,817
N.F.	13	3,07	0,75	-0,23	0,817
School positive outcome					
F.C.	13	2,69	1,03	-1,94	0,064
N.F.	13	3,38	0,76	-1,94	0,065
Social responsibillity					
F.C.	13	3,23	1,01	-0,65	0,521
N.F.	13	3,46	0,77	-0,65	0,521
RESILIENCE					
Emotional self control					
F.C.	13	2,92	0,64	-0,26	0,792
N.F.	13	3	0,81	-0,26	0,792
Outcome self control					
F.C.	13	3	0,81	0,24	0,806
N.F.	13	2,92	0,75	0,24	0,806

CONCLUSIONS

The results supports the hypothesis that institutionalized children have more difficulties concerning the achievements regarding the socio-emotional skills compared with children placed in foster care.

Furthermore, the developmental level of socio-emotional skills of children placed in foster care is close to that of children living within natural families.

As shown in most studies concerning attachment development in children placed in residential care system, the likelihood that they develop a stable and secured attachment with the caregivers is very low. This is due to specific organizational aspects of the wellfare system involving permanent staff shifting.

On the other side, the externalization and internalization problems that arise as a result of abusive treatment, may lead to establishing measures to remove the child in other residential centers which can alter the resilience of the child, and at some point these changes may constitute itself triggers of emergence of new behavioral disturbances that overlap the existing ones. Furthermore the existing problems exhibit before placement become components of the problems that arise in response to the experience of being in the wellfare system.

Problems in wellfare system, including lack of residential stability and phychotherapeutical limited resources, combined with lack of parental support, often are delaying the process of assessment and appropriate intervention of mental health problems (Arcelus, et al., 1999; Barber et al., 2001).

For children placed in FC situation is completely different in that there is the possibility of developing a type of stable attachment to the primary caretaker and his family which also offers children a model and appropriate support for social and emotional skills. Furthermore this type of care involves a learning model of behavioral patterns specific to a functional family.

The limits of the study are that the present study is a pilot one, the samples considered are limited in terms of number of participants, and this disable to generalize results across populations. Also it may appear some variables that are not well measured that can distort the results such as subjectively assessment of certain dimensions due to active involvement in the child's life.

Comparative assessment presented in this paper was conducted in order to further test the effectiveness of the program YCDI (You Can Do It Education) whose assessment datasheets were used. Due to the lake of researches on this subject in our country we plan to study the effectiveness of program implementation YCDI in residential care centers on the national level.

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AN ASSESSMENT OF HEREDITARY AND SOCIAL FACTORS IN CREATIVITY

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Abstract. *To reveal the mechanisms of creative activity we recall the theoretical definition of creativity proposed by D.Bogoyavlenskaya. Instead of a commonly used description of the features of creativity she isolated a unit of the creative process, "intellectual self activity" (ISA). This unit is defined as an individual's initiative to attain knowledge by means of continuing a thinking process beyond the limits of a given assignment. A specific psychological method for the diagnostics of ISA, called "Creative field", allows to simultaneously untangle the two main components (intellect and motivation) of the creative process and to give a qualitative, and also a quantitative assessment, of ISA. We studied the genesis of ISA by using different types of family relations and the twin method. The values of the main components of the phenotypic dispersion provide definite evidence that environmental influences exceed genetic factors. We compared the level of ISA of a given individual with his/her dominating type of social relations: "functional" versus "substantial" (K.Abulhanova-Slavskaya). Being involved in a life-time personal relationship, non-separated twins provide an ideal experimental model for such a comparison. Our results show that ISA is determined by social factors, and that the cognitive and social initiatives of an individual have common roots.*

Keywords: *two research paradigms, definition versus description, qualitative and quantitative assessment, creative process, intellectual self activity, initiative to attain knowledge*

INTRODUCTION

L.S.Vygotsky introduced epistemology into psychology and indicated two ways of studying the psychic: the direct way of increasing complexity of the structure and psychic functions which nature has followed, and the reverse way, based on the knowledge of the most elaborate form and allowing to trace rudiments of suitable phenomena in all intermediate forms. These two ways have produced two research paradigms: the psychometric one and the process-activity one.

The direct way is charted by taking ideas from diverse fields of knowledge and adaptation of universal methods. The psychometric approach was formed by utilization of the wide spread term "association" for interpretation of the stimulus-reaction scheme of behavior borrowed from the theory of evolution and by using the test method to measure hypothetic indicators (essential, inessential) of the studying psychic phenomena. In the evolution scheme intellect plays a key role ensuring an effective adaptation (by finding responses to the complex challenges of nature), and this is why it is considered as the most elaborate form of the psychic. Distinguishing between the psychic of animals and humans, Sir F.Galton (Galton, 1865.) rightfully declared geniality as the highest attribute of mankind and one that exhaust its spiritual nature. Being convinced on practical grounds in the lack of prospects in a statistical representation of the signs of geniality (they are not continuous and normally distributed) Galton bypassed the problem by assuming that intellectual ability is the most obvious populational sign of geniality. This has led to an interpretation of creativity as a maximal level of development of abilities, and intellect has appeared as the most extensive notion to encompass a majority of psychic manifestations, including creativity. A search for specific manifestations of creativity (fluency, flexibility, originality) in the depth of intellect through divergent tests has found memory as a basic feature of creativity. A comparison of measurable signs presumably belonging to creativity does not give an answer about influence of genetic and environmental factors on it. The psychometric usage of universal (non-specific psychological) methods and notions enables one to merely describe psychic phenomena empirically, but does not yield an explanation of these phenomena, i.e. does not lead to disclosing their determinants and revealing their mechanisms.

The direction of the reverse approach is set by the theoretical definition of the highest form of the phenomenon studied. Consideration of the psychic as a qualitatively specific property of personality has allowed S.L.Rubenstein to obtain brilliant results in the study of the thinking process and in uncovering its determinants. A.N.Leontiev's clear cut hierarchy of the concepts of "activity", "action", and "operation" yields a coordinate system which is adequate for understanding the determinants of the creative process. While studying the thinking process D.B.Bogoyavelenskaya found out that a person's attitude has a crucial influence on

the faith of the thought. If one considers solving a problem merely as a means of achieving goals which are foreign to attaining knowledge as such, thinking stops with the solution of the problem. If however knowledge itself is a sovereign goal, then the thinking process continues to develop. In the words of Bogoyavelenskaya, we witness the phenomenon of "self-propagation" of activity beyond given requirements. Such non – externally motivated productive activity bears the secret of the highest forms of creativity.

The difficulties of the psychometric approach are resolved within the attempt of revealing the mechanisms of creative activity described below. Bogoyavlenskaya proposed a theoretical definition of creativity which is more than just a description of the features of creativity. She isolated a unit of the creative process, "intellectual self activity" (ISA), defined as an individual's initiative to attain knowledge as such and to continue a thinking process beyond the limits of a given assignment (Bogoyavlenskaya, 1971). This unit characterizes the ability of human psychic to generate a flow of thoughts not only in response to an external stimulus but as a means of posing one's own problem. We believe that ISA goes beyond psycho – physiological activity, and we study its genesis.

ISA is characterized by the fact that it reflects both the process and result of the interaction of mental abilities with motivation. Each of these components taken separately does not represent creativity. Mental abilities form the foundation of ISA, but their appearance in ISA is refracted through the motivational structure of personality.

In the course of study of ISA two types of motivation were singled out. These reflect qualitative cognitive differences among individuals. The domination of motivation to acquire knowledge, that is the interest in the matter itself not just in personal success, secures a high level of cognitive self-activity. This type of motive ensures maximal realization of the intellectual potential. If the dominating motivation is external then the cognitive potential of a person suffers damage. Thus the motivation to achieve recognition at any cost appears to be an obstruction for cognitive self-activity. This explains why a person with very high mental capacities may not exhibit the initiative to attaining knowledge, and why people with equal level of mental capacities differ in creativity.

METHODS

In its highly developed form, creativity itself gives birth to a goal. Intellectual activity is no longer just a response. Hence methods of diagnostic of creativity cannot be based on assignments requiring only a response. In coherence with her definition, Bogoyavlenskaya developed a specific psychological method for diagnostics of ISA called "Creative field". The principles of the method are as follows:

1. Lack of judgmental impetus; this gives the examinee a chance to show his/her own initiative to attaining knowledge. 2. Lack of "a ceiling" in the investigation of a given object applies to the entire system; unlike an "open task", the system of assignments allows to diagnose quality and assess quantity within the same experiment. 3. No time limits; each experiment has multiple sessions. While all above requirements can be realized by the use of different experimental material, their abstraction as general principles forms the new method. It allows to simultaneously untangle the two main components of the creative process (intellectual and motivational) and to accurately reveal their roles.

Qualitative assessment of ISA

Using ISA as a universal unit of creativity, the following qualitative types of ISA have been singled out by Bogoyavlenskaya.

Stimulated – productive. Even while solving the experimental assignments in a most conscientious and energetic fashion, individuals of this type (which we qualify as stimulated – productive) remain within their initially found framework. For some of them the new activity provokes curiosity and gives a pleasure which lasts throughout the experiment. For others the activity provokes a strong interest while it is new and difficult. But as soon as they master the activity and it becomes monotonic, their interest is exhausted. The lack of an inner source of stimulation for the interest in attaining knowledge determines the quality of this type of ISA. Its main signs are external stimulation of the thinking process and lack of intellectual initiative although the activity may clearly have productive character. Tasks are being analyzed according to their individual features and without reference to the rest. The highest achievements at this type of ISA reflect only a high level of mental capacities.

Heuristic. The activity becomes creative by nature. While having a pretty reliable method of solution, this type of individual (which we qualify as heuristic) continues to analyze the contents and structure of his/her activity, compares the separate tasks, and as a result finds new patterns that are common for the whole system. These patterns can lead to new, original methods for the solution of a given, i.e. external, problem. Unlike the stimulated – productive type, this type of ISA represents intellectual initiative. If, at the stimulated – productive level, the thinking process serves as a means for realization of an outside goal, at the heuristic level the product of the thinking process is being perceived as a discovery or a creative finding. This finding, however, appears as a side effect, or as an extra result, but not as an objective.

The highest type of ISA is the *creative* one. Here the patterns found are not used as means for solution. They are considered as a new problem for the sake of which the subject is ready to abandon the offered experimental activity. Found patterns become subject to verification through search for a common origin. Here

the phenomenon of true goal-setting appears for the first time. In contrast with well – known tests on sensitivity to problems (i.e. on the ability to see defects) here we really deal with posing a new problem.

Quantitative assessment of ISA

A special diagram (see diagrams 1 – 3) was set up for quantitative assessment of ISA. Given tasks are listed horizontally. Different attempts for solutions of each task proposed by examinees are listed vertically. The line connecting the solutions represents the work of each examinee. The area under this curve provides a quantitative value of ISA, i.e. yields a functional representation of ISA.

Parameters of the thinking process

In addition to detecting an ability of an individual to develop activity beyond the limits of a given assignment, the "Creative field" method allows the display of an intellectual component of the creative process. We have worked out the quantitative scales for the following parameters of the thinking process of a examinee during the course of the experiment: the rate (speed of mastering the new activity); the ability of generalization; thrift (the amount of information necessary for the examinee to make conclusions); self-confidence; flexibility; and the awareness (the ability of a examinee to provide adequate supporting arguments to his/her actions).

Motivational and personal disposition

During multiple sessions of each experiment with every examinee individually, we are able to observe a motivational subsystem at work. In order to gain additional detailed information, we have developed a questionnaire. It enables us to evaluate the life long stability of an examinee's personal disposition which determines creativity.

PARTICIPANTS

We study the genesis of ISA by using different types of family relations. We have split a total of 225 examinees into the following groups: 20 pairs of identical twins, 20 same sex pairs of fraternal twins and 20 same sex pairs of non-related examinees. The total number of females in the above pairs was 72 (respectively the total number of males was 48), and the age of these 120 participants varied between 15 and 25. The additional 105 participants were members of 28 strict families with children (mother, father, one or more children). The total number of females in this group was 54 (respectively the total number of males was 51) and the age of all participants in this group varied between 15 and 53. 21 families were complete

and in 7 families one of the parents was missing. 6 families were working class families, 7 families were of the middle class professionals, and 15 families were of an academic middle class background (professors, scientists, etc.) High school students, university students, and working youth participated in the ISA experiments.

DISCUSSION OF RESULTS

Assessment of ISA and of the parameters of the thinking process

Among all examinees, 189 demonstrated a stimulated – productive type of ISA, 35 were at the heuristic type, and 1 examinee demonstrated creative type. This distribution of ISA conforms to the distribution of ISA among the general population observed by other researchers (Bogoyavlenskaya, 2002). More precisely, in 12 families both parents and children had the stimulated – productive type of ISA; in 14 pairs of identical twins, 14 pairs of fraternal twins, and 17 pairs of non-related subjects both examinees had a stimulated – productive type of ISA; in 2 pairs of identical twins and in 1 pair of fraternal twins both examinees had the heuristic type of ISA. In general, however, examinees with the same type of ISA behaved differently throughout the experiment (see Diagram 1).
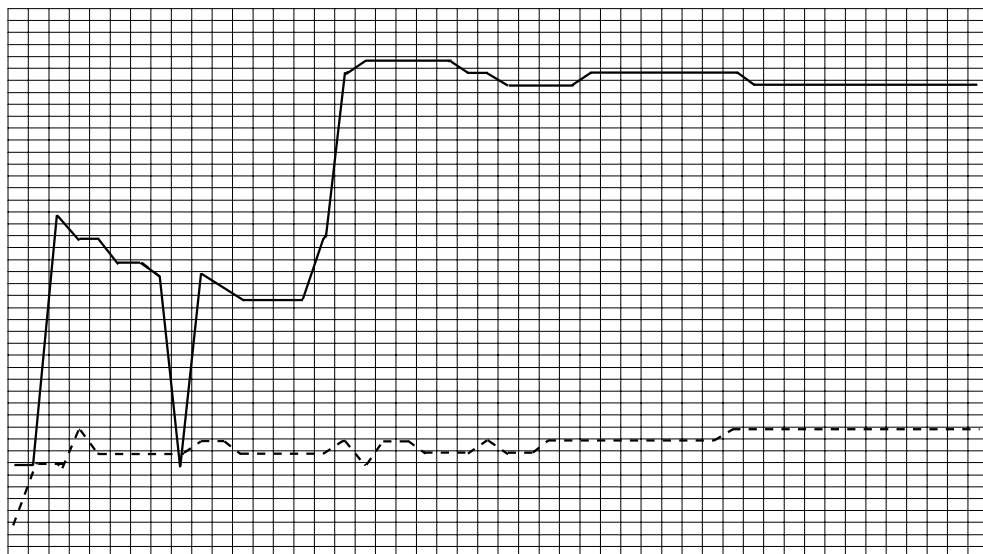
**DIAGRAM 1. IDENTICAL TWINS WITH STIMULATED –
PRODUCTIVE TYPE OF ISA**
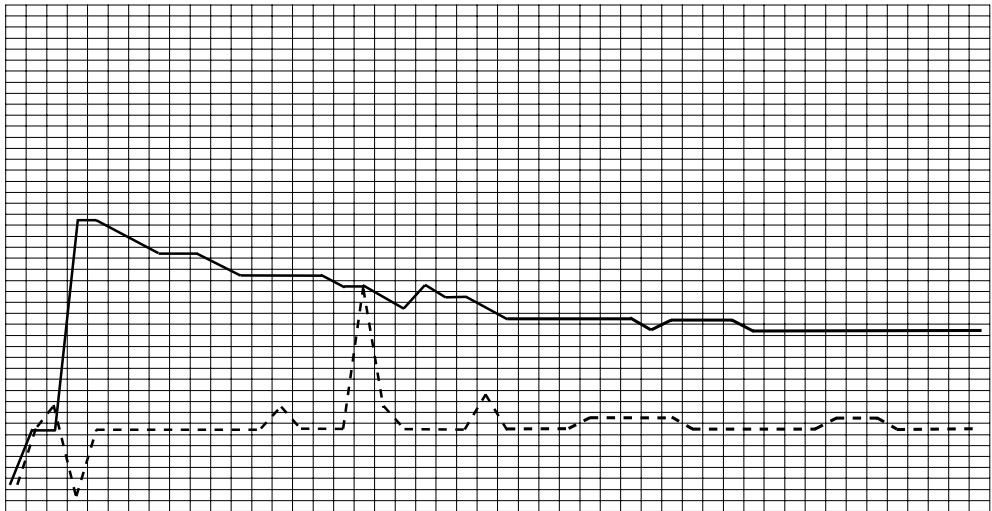
DIAGRAM 2 Identical twins with different types of ISA, stimulated – productive and heuristic
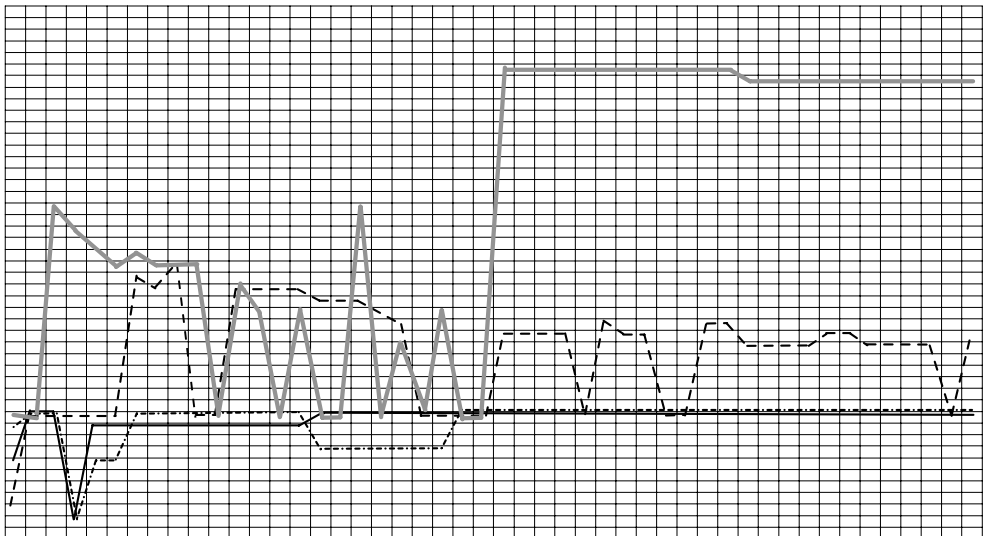
DIAGRAM 3 Family with different types of ISA: mother, father and daughter have stimulated – productive type of ISA, son has heuristic type of ISA

Furthermore, 16 families had non-uniform levels of ISA: in each family both stimulated – productive and heuristic levels of ISA were present, (see Diagram 3); in 4 pairs of identical twins, 5 pairs of fraternal twins and in 3 pairs of non-related examinees, one examinee displayed the stimulated – productive level of ISA while the other displayed the heuristic level of ISA (see Diagram 2). Finally, 1 family displayed all three levels of ISA.

The significant correlation coefficients of ISA in pairs of spouses provide experimental support for the theoretical statement of Bogoyavlenskaya that ISA is an essential feature of personality. A potential explanation for the similarity of ISA of spouses in families with stable marriages (spouses having lived together for more than 16 years) could be found in both the original preference of partners and by their long life together which forms coherent life attitudes and world outlook.

TABLE 1. CORRELATION COEFFICIENTS IN DIFFERENT GROUPS OF EXAMINEES

choice	Number of pairs	Correlation coefficient	z-transformation	u-criterium
identical twins	20	0.79*	1.07	4.2
fraternal twins	20	0.64*	0.76	3.08
non-relations	20	0.014	0.014	0.06
mother-daughter	8	0.48	0.52	1.16
mother-son	16	0.28	0.28	1.02
father-daughter	8	0.45	0.49	1.1
father-son	11	0.16	0.16	0.45
mother-children	24	0.41	0.44	2.01
father-children	19	0.24	0.25	0.98
parents-children	43	0.34	0.35	2.25
husband-wife	21	0.76*	0.99	4.22
siblings	11	0.39	0.42	1.29

*– significant coefficients

In the groups "mother – daughter", "father – daughter", "mother – son", and "father – son" the correlation coefficients were insignificant. The correlation coefficient in the group "father – children" was also insignificant, but in the group

"mother – children" it was significant, which can be interpreted as a certain tendency for similarity between the mother and children. The correlations, however, between groups "father – children" and "mother – children" were insignificant. It allows calculating the correlation coefficient in joint group "parents-children". Its value shows a definite tendency to similarity between parents and children. The correlation coefficient in the group of siblings was insignificant, while for the groups of identical and fraternal twins the correlation coefficients were significant.

Using the correlation coefficients in pairs of twins and relatives we calculated main components of the phenotypic dispersion: additive Ga = 0,38; dominant Gd = -0,05; coefficient of genetic determination G = 0,33; systematic environmental Es = 0,46; random environmental Ec = 0,21. These values provide definite evidence that environmental influences exceed genetic factors. The influences of environmental factors are mainly determined by general family factors rather than random factors.

TABLE 2. F – RATIO OF THE PARAMETERS OF IDENTICAL AND FRATERNAL TWINS

parameter	f-ratio	significance
awareness	0.69	insignificant
generalization	0.66	insignificant
self-suffiency	1.17	insignificant
thrift	1.34	insignificant
flexibility	3.22	significant
rate of work	2.67	significant

The significant differences in the dispersion for the parameters rate and flexibility in the 2 groups of twins may be interpreted as a possible influence of genetic factors on these parameters. The reason may be that these parameters reflect such properties of the nervous system as power, speed and agility, which are known to be genetically dependent.

Social determinants of creativity

Social relations determine the disposition and motivation of personality. Every person interacts with society according to his/her world outlook. K.Abulhanova-Slavskaya (Abulhanova-Slavskaya 1980) singles out the following ways of including "the other person" into a relationship with a given individual. 1. **Functional aspect**. The individual treats "the other person" just as "an object", evaluated by

its usefulness. In this case the relationship is simply a temporary alliance based on the mutual exchange of business services. 2. **Substantial aspect**. The individual treats "the other person" as "a value by itself" without reference to potential benefits from the relationship.

We were interested in a comparison between the type of ISA of a given individual and her/his dominating aspect ("functional" versus "substantial") of personal relations. Being involved in a life-time personal relationship, non-separated twins provide an ideal experimental basis for such a comparison. Their joint co-existence results in forming two spheres of interpersonal contacts, one of which is determined by the membership in their pair; another is determined by their membership in certain societal groups (school class etc.). The following three different roles characterizing each twin partner were found empirically: "external representative" (one of the twins expresses opinions for both); "dominant in pair" (has influence on the partner); "internal representative" (one of the twins is "the conscience of the pair"). Some of these roles reflect a "substantial" aspect of the relationship (making decisions for both, bearing the responsibility, etc.); other roles reflect its "functional" aspect (establishing contacts, being sociable, etc.).

More precisely, based on data from the experiments diagnosing ISA, and especially from the interviews, we singled out the following characteristics, which reflect the "functional" "substantial" aspects of the relationship of each twin partner with society. 1. Being sociable, establishing a lot of short-term contacts, having a wide circle of acquaintance. 2a. Having deep and permanent, stable associations with friends. 2b. Being responsible for the twin partner, protecting, taking care of him/her, helping him/her in life and business.

The comparison which we carried out on 40 twin pairs, showed a certain connection between the functional and substantial aspects of a dominating relationship of an examinee with his/her type of ISA. Individuals with a stimulated – productive type of ISA show a definite tendency of confinement by socially necessary relations and relations yielding clear cut short term benefits. We found another kind of dominating relationship in a majority of examinees with heuristic type of ISA. It is characterized by qualities such as thoughtful attitude towards people, compassion, and a participation in undertakings for the innovation of community and society.

CONCLUSION

Our experimental data demonstrate that ISA is a core feature of personality. Moreover, our results show that creativity (at the types at which it appeared in the experiment, mostly at the heuristic type) is strongly correlated not only with high levels of intellect but also with certain moral values manifested through dominating social relations of "substantial" aspect. This suggests the conclusion that the cognitive and social initiatives of an individual have common roots.

Due to the intrinsic determination and freedom of creativity, no training can be a means of its development, explains Bogoyavlenskaya. A perfect training can merely work out a sequence of operations and increase a score of a test in which this operations are relevant. Lack of understanding of the creativity phenomenon reduces pedagogical influences to stimulation of productivity and training of relevant skills. Motivation which emerges through competition has negative influence on a person's dedication to the intellectual cause, as it directs the performer's interest to distinguish him/her self, instead to the subject of work as such. Bogoyavlenskaya's definition of creativity allows formulating adequate pedagogical recommendations for development of a creative personality. Understanding of the final quality of creativity shows a clear direction of the educational arrangements and allows avoiding influences deforming a child's motivation to attain knowledge.

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PSYCHO-BEHAVIOURAL IMPLICATIONS OF PARENTAL STYLE DURING CHILDHOOD

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Abstract. *The development of interpersonal behavior in children, taking account of the surrounding people's needs, of the abilities to express emotions and thoughts in a way that satisfies their own needs and wishes, but also respecting those of their interlocutors, are the consequences of practicing efficient parental styles. The effects of exerting the parental style are found both on the level of familial psycho-affective climate, as well as mostly on the child's psycho-behavioural level. By the present study we wish to investigate the relationship between the parental style (permissive, authoritarian and authoritative) as perceived by children and their interpersonal behavioural type (assertive, aggressive and passive). The panel of subjects (45 individuals), selected and allotted by simple randomization, has been made up of boys and girls (of ages between 9 and 11 years old) and their parents, in the urban environment. We have applied as investigation methods: the Parental Authority Questionnaire, the Assertiveness Scale for Children-adapted and the mathematical-statistical method. Acknowledging the effects of the parental style on the psycho-behavioural level of the child has a practical relevance, by developing training programmes of adapting interpersonal behaviour, but also that type of programmes with the value of intervention and involving parents and children.*

Keywords: *childhood, parenting style, child behaviour*

INTRODUCTION

Education within the family represents an essential way of achieving education and has the following main characteristics: it is carried on immethodically, by concrete, direct life experiences; it is shown diffusely in the individual's and groups'

behaviour; ingraines personality with its specificity or by implicit, integral and continuous influence (Ionescu, M; Negreanu, E, 2006, p. 6). The quality of familial education influences at early ages the development of an individual's personality, his chances for school success and further accomplishment.

The influence of familial educational actions contributes to the children's socialization, by conveying attitudes, values, conceptions or behavioural patterns. Thus, family becomes the main agent of socializing.

Socialization within the family has certain common components/dimensions: the normative one (that conveys to the child the main social norms and rules), the cognitive one (by means of which the child acquires knowledge and skills); creative (developing creative thinking in order to give appropriate answers to new circumstances); psycho-affective (that develop the affectiveness needed to relate to parents, with the future partner, with one's own children and with other individuals) (Ionescu, M; Negreanu, E, 2006, p. 10).

During childhood, socilization coincides with the development of the child's ability to distinguish and predict the other's reactions toward his behaviour and/or to elaborate on his own appropriate and competent answers. Both the perception on the other individuals' reactions as well as on his own behaviour, the way he is perceived by other individuals, represent direct effects of the socialization process, resulting in building up one's personality, shaped and improved within the group processes (Radulescu, S; Banciu, D., 1990, p. 19).

Psycho-Bevavioural Patterns During Childhood

The way a child relates to the group of other children, to adults, as well as to social circumstances he meets is achieved by means of three qualitatively different methods:

The assertive behaviour reflects the child's option to take into consideration the wishes of the others, at the same time with the attempt to fulfill his own desires.

The child expresses in a direct manner his wishes, expectations, feelings. This kind of behaviour has social consequences: the others are charmed their desires are taken into consideration, are motivated to treat them similarly, search for their company. The consequences are also emotionally positive (Lemeni, G; Miclea, M., 2004, p.81).

The aggressive behaviour represents expressions reflecting the choice of not taking into consideration the wishes of the others. It doesn not imply the direct expression of wishes, expectations. The social consequences of such a kind of behaviour are: the others are not happy with their desires not being considered, the others look at me with fear, are avoiding my company, and emotionally the consequences are anger and fear (Lemeni, G; Miclea, M., 2004, p.81).

The passive behaviour shows the choice of not taking into consideration his own wishes, simultaneously with accepting the fulfillment of the desires of the others. It involves either failure in expressing their own wishes, expectations, that involves minimizing their importance. The consequences in this case are reflected in: the others are delighted I take their wishes into consideration, the others do not respect me, they do not trust my sincerity, while emotionally the results are fear, sadness, anger (Lemeni, G; Miclea, M., 2004, p.81)

Children's behavioural development takes place in the context of interpersonal relationships, mainly within the family. The child's behavioural patterns are therefore learned. The mechanism of learning unadaptative behaviour is simple: most of the people wish to involve themselves into interpersonal, reciprocal relationships, of which they may derive benefits and, at their turn, may offer some. When they interact with an aggressive or passive person they are just partially satisfied, because they cannot fulfill both aspects.

On the other hand, when interacting with people, an aggressive or passive person will fulfill all wishes. In each case of interaction, aggressive individuals reach all their objectives, offering nothing or the least, and the passive individuals care for the others, without taking anything in return. Such interactions act as reinforcements for the aggressive and passive persons. Thus, these types of behaviour are reinforced, leading to searching for further similar actions (Lemeni, G; Miclea, M., 2004, p.80)

The approach of the parental style as a factor influencing the psycho-behavioural manifestations of the child represents a theme of large interest, a challenge with multiple implications both theoretical, methodological, as well as practically-active.

Parental Style

The parental educational style views the nature and characteristics of the familial relationships in the context of which the educational process is carried on (Stanculescu, E., 1997, p. 91).

Families convey values and knowledge, using various styles, methods and techniques, addressing different styles, methods and techniques. The studies dedicated to the given topic (Reuchelin, 1972; Kellerhals, Montandon, 1991) are centered around two axes: the axis authority/liberalism or constraint/permissivity and the axis love/hostility or attachment/reject. The psycho-behavioural indices in the first case are those reflecting the limits and constraints demanded by parents on the children's activities, their responsibilities, the manner parental control is exerted, the rigourousness in applying and controlling rules; the indicators reflected on the second axis show the degree of parental committment into the child's activity, the help or support they offer, time granted, receptivity towards the emotional states and needs.

In defining parental styles, our study centers on the classification made by Diana Baumrind (apund Stanciulescu, E, 1997, p.91) that takes into consideration two variables: parental control and parental support. Therefore, we obtain four action models: permissive, authoritarian, authorized and indifferent, according to the following variables:

– exigencies („demandingness"), requirements, expectations, pretences of the parents towards their children regarding their participation to family life, *hopes* for the further mature behaviour, discipline, manner of children's solving issues occurring in their life.

– „responsiveness", understanding, sympathy, support that parents grant to their children, as to protect their individuality, self-assertion, self – adjustment and to respond to the children's specific needs psychological control or focusing demands on concrete tasks.

We may characterize styles as follows:

⚕ *The Authoritarian style* associates a high level of control with a weak support in the child's activities; inviolable principles and rules for conduct are commanded to the child: authority, tradition,work, order, discipline are values that parents sistematically impose on their children.

⚕ *The Authorized style* combines the systematic control with a high level of parental support. Parents issue rules and control how they are observed, but do not command them, but are opened to verbal exchanges with their children, explaining the reasons for the rules and the circumstances when they apply and stimulating at the same time the children's thinking authonomy.

⚕ *The Permissive style* is characterized by a low level of control, associated with the parent's identification with the child's moods. Few norms of conduct and responsibilities are imposed to the child and how he/she responds to the parental expectations is under a weaker control. Parents try to understand and respond to the child's needs.

⚕ *The Indifferent style* is characterized by noninvolvement and indifference. Just a few rules are requested and there's a weak level of control on them. There is no motivation in educating the child and the parents are not at all emotionally involved.

The Objectives of the Study

The present study aims at investigating the relationship between parental style and the way the child behaviourally responds in various circumstances, as well as the implications this type of relationship may have over the development of the child's personality.

METHODOLOGY

Participants

A number of 45 children of ages between nine and eleven years old have participated in this study, their residential environment being the urban one. They have been selected by simple randomization from a public school. Their parents are also part of the selected sample. The sample characteristics are presented in the following:

SAMPLE OF CHILDREN

Age	Number of participants (N)	Gender	
		M	F
9 years old	N= 15	11	4
10 years old	N=15	8	7
11 years old	N=15	6	9

Overview of procedure

During a monthly meeting with parents at school, they were asked for permission to participate in this study, both themselves and the children. We mention that all the subjects have been previously informe don the purpose of the research, being presented briefly the basical premises and the research methodology.

After the instruction on the questionnaire regarding the type of dominant behaviour, children were given the form to fill it in. A week after, their parents have been asked to respond to the questionnaire on the parental style they use.

The participants were encouraged to attentively read the instructions. The written training has been completed with supplementary information regarding the method of filling in each form/tool.

Measures

Assertiveness Scale for Children– represents a tool which is adapted after the ASA instrument – proposed by Dong Yul Lee, E.T. Hallberg, A. G. Slemon&R. Haase and that measures the assertiveness in teenagers, in different circumstances. The tool aims at: to obtain children's reports about their typical behaviour that could be used by practitioners to identify interpersonal problem areas, to be used as a screening device for intervention or prevention programs and to be used as a research tool in investigating assertiveness.

The tool we have adapted for the ages bewteen 9-11 years old describes twelve interpersonal situations that presume three options of response on how they would usually behave in eachof them. The three situations correspond to three

types of behaviour: assertive, aggressive and passive. One of each of the three options for each situation has been designated as the assertive response. Each of these responses is assigned one point and the scores are summed, producing an overall assertiveness score that can range from 0 to 12.

Parental Authority Questionnaire– the PAQ tool, created by John R. Buri. The PAQ is a 30 item instrument designed to mesure parental authority or disciplinary practice from the point of view of the child of any age. The PAQ has three subscales based on prototypes of parental authority: permissive-relatively warm, nondemanding, noncontrolling parents; authoritarian parents who value unquestioning obedience and attempt to control their children's behaviour, often through punitive disciplinary procedures; and authoritative – falling somewhere between the other two dimensions, using firm, clear but flexible and rational models of parenting. The PAQ is scored easily by summing the individual items to comprise the subscale scores. Scores on each subscale range from 10 to 30.

RESULTS AND DISCUSSION

The results were drawn following the investigation we have carried on in order to identify the parental style, on the 45 study participant parents, 82,2% women and 17,8% men. After applying the questionnaire for theidentification of the used parental style, we have drawn the following results: 48% of the parents declare they have a permissive style, 24,4% practise an authoritarian parental style and 26,7% an authoritative type of parental style.

We present in the following the distribution of parents – subjects (gender) according to the "practised parental style" variable, as well as according to the educational level.

TABLE 2

Parental style	Gender of the parent		Parental educational level	
	Feminine	Masculin	Average level of studies	Higher education
Permissive	51,4%	37,5%	50%	47,1%
Authoritarian	26,6%	37,5%	21,4%	29,4%
Authoritative	27%	25%	28,6%	23,5%

Out of the presented data we notice that, generally speaking, mothers have a permissive educational style, based on a low control and maximum support, whereas fathers are both authoritarian, but also permissive, in equal proportions.

Concerning the educational level, we notice that parents with an average level of studies are much more permissive than those with higher education, but the dfifference is not statistically significant. The explanation may reside in the small dimension of the sample, pointing that the present study represents a pilot one and, on the other hand, the age of the children (nine to eleven) does not imply a much high level of parental control.

Analysing the results in the children's sample, we find out that 28,9% of them have an assertive behaviour, 22,2% an aggressive behaviour and 48,9% have a passive type of behaviour. Thus, we notice that for the age interval 9 to 11 years old children have more like a passive type of behaviour. To refine the analysis we present in the following the distribution of the behaviour type variable in children, according to the gender and according to age.

TABLE 3

Behavioural type	Gender		Age		
	Feminine	Masculin	9 years old	10 years old	11 years old
Assertive	36%	20%	20%	40%	26,7%
Aggresive	8%	40%	6,7%	20%	40%
Passive	56%	40%	73,3%	40%	33,3%

The work hypothesis in which we presume there is an association relationship between the behavioural type and their gender has been checked using the statistical "chi square" test, for non-parametrical data.

As such, the data of the research confirm a higher frequency of the aggressive behavioural type in boys – 40 % – than in girls, of only 8 % (chi square = 6,68, p<0,05). The diagrams below shows this fact (Table 4):
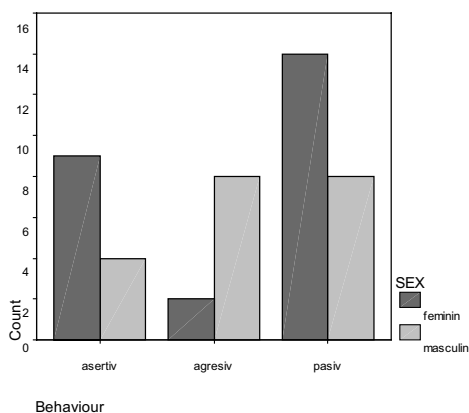
TABLE 4   **TABLE 5**
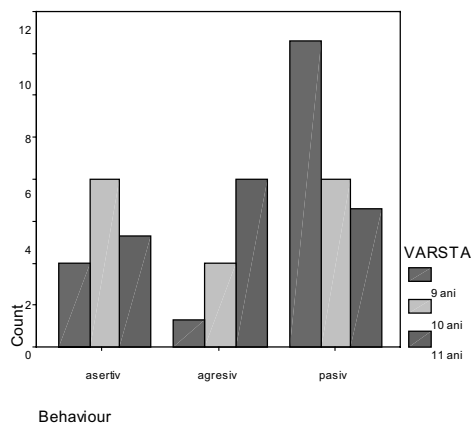
Concerning the second work hypothesis, where we presumed there is an association relationship between the practised behavioural type and children's age, this was checked as well with the help of the chi square test, but it hasn't been confirmed, the values being: chi square = 7,695, and the value of p = 0,103 (Table 5).

The study hypothesis: We presume there is an association between parental style and the behavioural style of children between nine and eleven years old.

We present in the following the distribution of the values recorded for the behavioural type and the parental type that are employed.

TABLE 6

Behavioural type	Parental Style		
	Permissive	Authoritarian	Authoritative
Assertive	46,2%	15,4%	38,5%
Aggresive	40%	60%	0
Passive	54,5%	13,6%	31,8%

The value of the Chi square test is 10,649, df=4, and the value of p<0,05, which entitles us to accept the research hypothesis.

TABLE 7
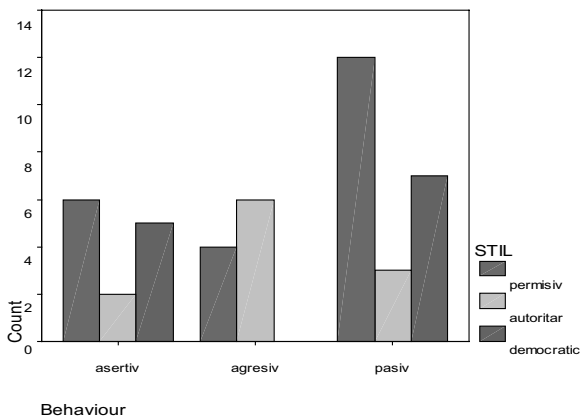
Out of the presented data we may notice that practising an authoritarian parental style leads to aggressive behaviour of the children, while the permissive style is associated with the passive, noninvolvement behavioural type.

In social behaviour, children still immitate the style of the parental authority. A lack of guidance, control from the parents associates with a noninvolvement behaviour, of fear to approach an interpersonal circumstance.

Interesting enough is the association between the passive and the authoritative parental behaviour. It may be explained by the fact that interpersonal relationships are not yet mature enough, that social competencies still develop.

CONCLUSIONS

The results of the rpesent study cannot be generalised, as they are representing a pilot-study for a much larger further reserarch about to be developed. What it has revealed is a validation of the research direction we are heading for, that is an approach of the parental style issues, practised in connection to different childhood behavioural types.

The practical connotations this study opens refer to conceiving and validating some training programmes, of the social and emotional components during childhood, for a better adjustment of children to various interpersonal circumstances on one hand, and on the other, of a series of programmes that could make parental educational styles more efficient.

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RESEARCH WORK OF THE PERSONAL PREFERENCES CHARACTERISTICS OF THE 8 OR 9-YEAR-OLD CHILDREN DEPRIVED OF PARENTAL CARE

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Abstract. This work is dedicated to the peculiarities in the psychological development of eight or nine-year-olds who live and are brought up in social homes. 40 children, aged 8-9, participate in this research work. Twenty of them are being brought up in a Home for children deprived of parental care 'Maria Louisa' in Plovdiv, and the other twenty live in a family environment and attend state schools. The motivation and necessities areas of the children deprived of parental care are poorer and more unvaried than those of the children brought up in a family environment. For the children from the social home the predominant desires are related to the family, home, relatives and most of all – the mother. The idea of the future of the children deprived of parental care remains unvaried and vaguely realized.

Keywords: deprivation; children, deprived of parental care; motivation; personal development.

INTRODUCTION

This research work is dedicated to the peculiarities in the personal development of eight or nine-year-olds who live and are brought up in social homes and are deprived of parental care.

Research work of a series of authors shows us that the development of the children brought up outside families has its own specifics, different from those of the children with parents(Spitz, 1945; Bowlby, 1969; Lisina, 2009; Prihojan and Tolstyh, 2005; Tagareva 2007a,b,c etc.). Orphaned children's psychological development is not defined by 'norm – pathology' criteria. As Prihojan and Tolstyh note, children deprived of families are not only years behind in their development of personal constituents, but they also possess an entirely different way of charac-

ter forming, which is 'not worse, just different'(Prihojan and Tolstyh, 2005, p. 13). Some of the characteristics of this type of personality are:

⦙ Behavior, which is dependent on the situation and on the subject sur-roundings (Lisina, 2009; Dubrovina, 1990).
⦙ Poorness of self-consciousness (Dubrovina, 1990).
⦙ Peculiar phenomenon of awareness, characterized as "alienation from personal experience", when separate experienced episodes do not be-come events in the child's personal life, do not belong to and are not part of the individual psychological experience (Smirnova, 1991).
⦙ Weak development of the purposeful behavior, child's orientation to-wards external control (Prihojan and Tolstyh, 2005).

In this research work we examine the personal preferences of the children deprived of parental care. The **subject** of this analysis is children's main desires. A full of matter analysis of the children's desires will help us peep into the world of their interests and intimate experiences and understand what these children crave for, what they dream about.

Our **main goal is**: through our own experimental research to study the spe-cific characteristics of the motives and needs of the children aged 8 to 9, deprived of parental care.

Our main **tasks** are:

⦙ To study the motivational preferences of the eight and nine-year-olds living in families.
⦙ To study the motives and the desires of the eight and nine-year-olds deprived of parental care.
⦙ To compare and analyze the results.

The hypothesis is as follows:

We presume there are specific characteristics in the needs and motivation development of children aged 8-9 and deprived of parental care compared to their peers who are being brought up in a family environment.

We presume that the predominating desires of the children from the social homes are connected with having parents, family, relatives or a home.

The object of this research:

A total of forty children, aged 8-9, participate in this research work. Twenty of them are being brought up in a Home for children deprived of parental care 'Maria Louisa' in Plovdiv(I EG), and the other twenty live in a family environment and attend state schools(IIEG).

METHOD

The methods used – a modified version of 'The Magic Flower' of A. Prihojan and N. Tolstyh (2005). The children are offered a piece of paper with a flower drawn in advance. Their instructions are: 'Imagine that in front of you is a magic flower

with three magic leaflets. Each leaflet can make one wish come true. Write on each of the leaflets one of your desires. Each of you can write your biggest and dearest wishes.'

The diagnostics criteria are:

- ⸙ purpose and orientation of the answers;
- ⸙ qualitative categories;
- ⸙ time perspective;
- ⸙ modality of expression.

RESULTS

Purpose and orientation of the children's answers

The results shows that the purpose and orientation of answers of the children brought up in a family environment is:

- ⸙ Towards themselves – 98.3%
- ⸙ Towards others – 1.7%

With children brought up in social homes (I EG) all the answers are oriented towards the child's own personal world and there is not a single answer involving the others.

Expression of wishes directed towards other people shows the child's orientation towards social issues (IIEG) . For instance, Slavina V., brought up in a family, wrote: 'I dream of a better life in Bulgaria. I want the streets in this country cleaned.'

The results of the main categories of motives

The "Magic Flower" method gives the opportunity to classify the children's preferences according to their content (motives, connected with family, games, study etc.). In our research, depending on the children's answers, 10 main preference categories were formed. Their names and ranks for the two experimental groups (IEG – children from the social homes and IIEG – children from families), are presented in table 1.

Results' analysis of the main categories, characteristic to only one of the two experimental groups.

The comparative analysis of the results of the two experimental groups showed that certain categories of desires are present in one but not in the other experimental group.

The results show that 6.7% of the answers of children brought up in social homes relate to desires connected with discipline, behavioral rules, the adult's demands execution (" I would like to listen to my instructors" , "to be good", "obedient" etc.). Such desires weren't registered in the children brought up in families.

This means that for the children of the social home it is very important to earn the attention and the approval of their educator, their teacher, and to receive encouragement and praise. We are inclined to believe that this comes as a result of the unsatisfied need for positive emotional contact of the children from the institution with the adults.

The analysis indicates that social homes' children do not have desires connected with "Pets" category. But children brought up in families reach 16.7% in this category. "I want to have a big dog with a long tail", "I want them to buy me a hamster", etc. The discussion of these results is closely connected to the one in "Material Benefits", which will be presented next.

Results from the category "Excursions and Knowledge of the World": in the social home there is not a single answer connected with the desire to visit countries around the world. In contrast with this, the children from the families demonstrate cognitive geographic interest: "My dream is to go to Japan", "My dream is to travel round the world". This data corresponds to the results of another research (Prihojan and Tolstyh, 2005), which shows that orphaned children have a very weakly expressed cognitive need, even in the most basic forms, such as showing interests in new facts, extraordinary events or striking examples from life.

TABLE 1. MAINPREFERENCE CATEGORIES AND THEIR RANKING POSITION

Categories	Rank		Quantity (in %)	
	Social home I EG	Families II EG	Social home I EG	Families II EG
Material benefits	2	1	18,3	28,3
Pets	-	2	-	16,7
Discipline	5	-	6,7	-
Jobs	3	3	13,3	10
Health	6	3	5	10
School	4	5	11,7	6,7
Knowledge	-	4	-	8,3
Magic	7	5	3,3	6,7
Film characters	7	6	3,3	1,7
Family	1	3	38,3	10

Note: The percentage is calculated according to the total wishes written by the children in the corresponding experimental group.

Results' analysis of the main categories, which are present in both of the experimental groups.

The results are displayed in Figure 1. Figure1 shows a comparison of the results in some categories: family, material benefits and school.
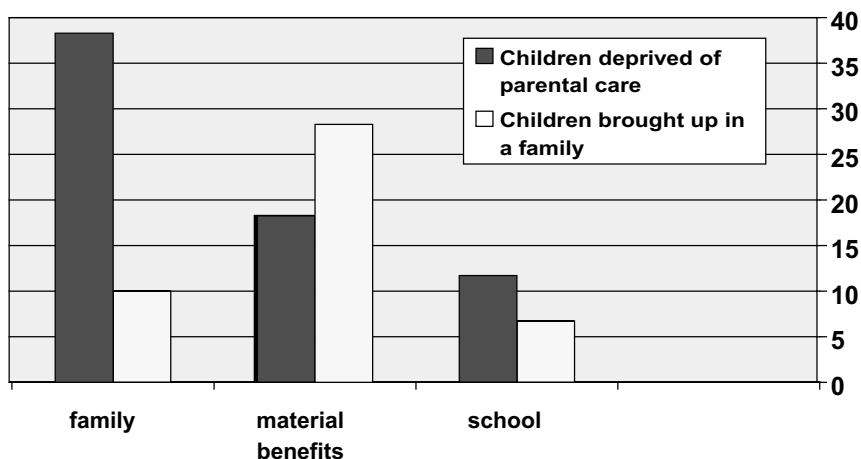
FIGURE 1. A COMPARISON OF THE RESULTS IN THE FAMILY, MATERIAL BENEFITS AND SCHOOL CATEGORIES OF THE CHILDREN BROUGHT UP IN DIFFERENT SOCIAL CIRCUMSTANCES

"Family"

The comparative analysis shows that children from both of the experimental groups express desires connected with the home, parents, brothers and sisters, and other relatives. As shown in table 1 and on figure1, this category holds the leading first ranking position for the children from the social homes (38.3%) and third for the children with families (10%). In addition, 70% of the children deprived of parental care wrote on at least one of the leaves of the "Magic Flower" a desire connected with the home, whereas this percentage in the children with families is 30. The differences between the two experimental groups here are statistically significant (p 0,001 in Wilcoxon criteria).

The analysis indicates differences in the nature of the desires. Children deprived of parental care have personal preferences of a **concrete and fragmentary** nature which are often connected with a certain **situation**: "I want mummy out of prison", "Mummy to come home", "To see mummy and daddy", "Mummy to come at least once", "To look like my sister" etc. Family children's desires have a **generalized** nature and are related to values such as health and happiness: "My dream is my family to be healthy and young", "I want I and my family to be happy and healthy" etc.

Moreover, the desires of the children from the institutions are connected most often with **the mother**, the family children's desires, on the other hand, refer to the **community called "family".**

The comparative analysis shows that 15 % of the children from the IEG and 5% of the children from the IIEG wrote on each leaf of the "Magic Flower" **only** desires connected with the family, i.e. these children are completely engaged with and submerged into the dream about their relatives. All of Ivan's three desires (his name has been changed) refer to his mother. He wrote "I want mummy to be well", "To go to mummy", "The baby to be fine and that I can go to mummy". Perhaps the reason for that is that Ivan had come to the social home two months prior to this, having lived with his mother before that. The child has established an affectionate personal relationship (attachment) with his mother, but its reliability is of an unstable nature.

Social homes' children dream of living in a family, getting back home, where they can be close to their relatives and, in most of the cases, their mothers.

"Material Benefits"

As you can see from table 1 and figure1, the "Material Benefits" category takes up 18.3% of social homes' children's answers and 28.3% of those given by children from families. This category represents the children's desires to have something of their own, to acquire something new. Pets' desire is connected with it, too. We come across the following answers from the social homes children: "I want a CD player", "A present – a teddy bear", "A bike", "I want rollerblades" etc. We believe desires of this type indicate an unsatisfied need of personal possession from the children deprived of parental care, a need for things which would belong only to them and no one else. Personal possessions help the child establish his or her independence, materialize his or her Ego. But in the social homes the things – the toys are for everyone. A phenomenon of public possession is present. In the families, together with the public possession, an individual possession is present.

As a result, we can speak of a series of unsatisfied needs from the social homes' children, among which is the need of personal possession.

"School"

The comparative analysis shows that the children not living in families express twice as many desires connected with school, teachers and school activities (11.7%) as their peers with families (6.7%). The children from the IEG write: "I want to have good marks at school", "I want to read well", "to write nicely etc. The phrasing of these wishes is practically the same and they have a **concrete** nature.

The results concerning the time perspective

Practically all the social home children's answers, connected with their self-alteration are oriented towards the near future and seldom contain far future perspective.

The idea of the future remains undefined and vaguely realized by the children deprived of parental care. It is our opinion that this has to do with the absence of close people who can talk to the children about their future and to discuss future possibilities in life.

The results concerning modality of the expression of the desires.

The students from the state school express their wishes using modal form verbs. The sentences begin with 'I want to have…', 'My dream is to…', 'I dream about…', 'I would very much like…', 'I cherish a dream…'.

The children deprived of parental care use a hypothetical, modal form of the verbs. In most cases there is a personal pronoun missing and the sentence begins with 'Want to…'. Many of the children omit the verb 'want', too. Their wishes simply start with: 'to go to mum'.

The orphans are not certain of their right to have a wish and do not feel masters of their own will. The lack of the personal pronoun represents a gap, a distance between the children and the wishes expressed by them.

The children from the social home show their 'outer' desires. There is an alienation from the desires present.

DISCUSSION & CONCLUSIONS

In conclusion to the research carried out, we confirmed the hypothesis forwarded at the beginning of the experiment. The following characteristics in the motives and needs development of children brought up in social homes were identified:

Concerning the motives' orientation. As a whole, **the motivation and necessities areas of the children deprived of parental care are poorer and more unvaried than those of the children brought up in a family environment**. The children with families show a broader motivation: together with the everyday routine they are concerned with many issues lying outside the borders of their personal experience – they are interested in global problems, which seem not to be connected to studying at school, homework and taking care of pets.

Concerning the main motives' categories. The analysis of the results representing the motivational preferences indicate that **for the children from the social home the predominant desires are related to the family, home, relatives and most of all – the mother**. In addition to this, their motives are directly connected to their everyday lives, studies, regime activities implementation and

behavioral rules. For the children brought up in families the predominant desires are the acquiring of material benefits and pets.

Concerning the time perspective. Practically all the social home children's answers as to their development, **are directed towards the near future and seldom contain a far future perspective**. As a whole, the idea of the future of the children deprived of parental care remains unvaried and vaguely realized.

Concerning the modality of expressing the wishes – the orphaned children tend to **use simple statements of wishes which are their most cherished dreams.** To formulate their wishes, they prefer the form 'Want…' instead of the unconditional 'I want…' used by children brought up in families. This is a significant difference between the two groups of children comprising the motive of the Ego.

The results of our research work make us speak about purposeful complex work for optimizing social homes' children's personal development. This requires combined efforts from all who work there: educators, psychologists, pedagogues and other employees.

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EMOTIONAL PROFILE OF SOCIAL SCIENCE STUDENTS IN DIFFERENT FAMILY RELATIONSHIP

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Abstract. *The goal of this research was to study connection between cohesion and flexibility in family relations and emotional profile dimensions of social science students. Cohesion is related to the emotional bond which family members feel towards each other. Family flexibility is the ability which allows family to change leadership, roles and rules in relations. Personal emotional profile consists of combinations of different intensities of primal emotions: incorporation, protection, orientation, deprivation, rejection, aggression, research and reproduction. The sample consisted of 132 students of education and psychology at the Faculty of Philosophy in Niš. For measuring cohesion and flexibility we used questionnaire FACES III (Olson et al., 1985) and PIE – Plucnik's test standardized by Kovacevic and Kostic 1997.Results revealed that there is no corelation between cohesion and dimensions of emotional profile. There is a significant positive correlation between orientation, rejection and flexibility in family relations. We researched the differences in emotional profile between students who apprised their family relations as low flexible, optimally flexible and high flexible. F-test showed that there are significant differences in aspect of protection, orientation, depravation, rejection and research. In subgroup with high flexibility there was a similar emotional profile (11 out of 20 students had similar emotional profile) and its characteristics were high rejection and orientation. In subgroup with low flexibility emotional profiles were diverse. Low flexibility is connected with higher deprivation.*

Key words*: cohesion, flexibility, personal emotional profile.*

INTRODUCTION

In modern psychological research there is an intention to point out which personal dispositions are more adaptable to social learning. We approached this problem from the standpoint of family system theory and Plutchik's theory of emotion (Barker 1992, Plutchik 2006). Conducted research should provide some data about connection between family cohesion and flexibility and personality dimensions according to the theory of Robert Plutchik.

When we talk about family relationships, we talk about family cohesion and family flexibility. Family relationships that involve persistence of family cohesion, and respect for the individuality of family members, are considered to be functional (Barker, 1992; Milojković, Srna, Mićović, 1997). Cohesion is defined as the emotional connection that exists among family members.There are four levels of cohesion: very weak cohesion, low cohesion and emphasized independence, mutual loyalty and average and high cohesion, and high dependence and cohesion.

Family flexibility refers to its willing to change leadership, roles and rules in relations. Leadership, control, discipline, discussions, styles, roles, decision of rules, are the parameters of family life related to ability of family to change and adjust the developmental needs of its members, i.e. the family life cycle. According to flexibility, the family can be divided into: rigid family, with very low flexibility; structured family, where flexibility is from low to average; flexible, and chaotic, with very high flexibility.

Pluchik differentiates eight primary emotional dimensions (Kostić, 1997; Lamovec, 1997; Plutchik, 2006): incorporation, acceptance of other individuals into our own social group; protection, the way we behave due to fear; orientation, a short surprising reaction that is provoked by encountering an unknown object or territory; deprivation, reaction provoked by loss of something enjoyable that was previously possessed; rejection, behavior triggered in order to remove something harmful, which was previously injected; aggression, behavior that is triggered by anger in order to remove an obstacle that prevents us from satisfying our needs which are important for our organism; the research, behavior due to expectation, which realizes contact between organism and various aspects of environment in order for it to be researched; reproduction, a prototype reaction that is related to sexual compound that has a characteristic approach and contact maintaining.

METHODOLOGY

RESEARCH OBJECTIVES

- Examining flexibility and cohesion within the family relations of students of the Social Sciences and Humanities.

- Examining the emotional profile of students of the Social Sciences and Humanities.
- Examining relations between flexibility and cohesion, as well as characteristics of family relationships and emotional profile of students of the Social Sciences and Humanities.

INSTRUMENTS

To examine the functionality of family relationships we used FACES III (Faces III, Olson, Portner, Lavoc, 1985), and for the emotional profile test we used PIE JRS, Plutchik's emotions profile index.

HYPOTHESES

- We expect that most students are coming from families with optimal family relationships (cohesion and flexibility). In functional families, those dimensions of family relationships are characterized by slightly higher cohesion, above the average. And when we talk about students' families, flexibility should be slightly higher.
- We expect that acceptance, sociability, spontaneity and curiosity will mainly dominate on the emotional profile of students. These dimensions were dominant in previous tests of psychologists' emotional profile. (Kostić, 1997).
- General research hypothesis is that connection between cohesion and flexibility with emotional profile of students of the Social Sciences and Humanities is going to be determined.

RESEARCH SAMPLE

The sample includes 132 first year students of psychology and pedagogy. There were 12 (9,1 %) of male students and 120 (90,9 %) female students; 126 (95,5 %) students of 18 to 22 age, and 6 (4,5 %) students of 23 to 27 age.

RESULTS

The first thing we did with analyzing the results was determining **of reliability testing of family relations.** Olson's test showed satisfactory reliability (Cronbach Alpha: flexibility 0.70: cohesion 0.85). Table 1, shows measures in descriptive statistics for examined variables. The assumption was that we'll get the values of tested emotions in accordance with previous research. In terms of flexibility and cohesion we assumed that cohesion will be more expressed.

TABLE 1. MEASURES OF DESCRIPTIVE STATISTICS

	Min	Max	AS	SD	skewness	kurtosis
Flexibility	17.00	46.00	28.54	5.74	.242	-.125
Cohesion	18.00	50.00	40.08	6.24	-1.027	.975
Incorporation	1	100	55.67	31.24	-.217	-1.316
Protection	6	100	58.94	27.90	-.228	-1.051
Orientation	0	100	43.91	29.62	.173	-1.185
Deprivation	2	100	48.15	32.26	.158	-1.440
Rejection	2	99	43.90	29.95	.395	-1.268
Aggression	2	97	39.78	27.51	.346	-1.104
Research	2	100	59.27	26.63	-.335	-.730
Reproduction	0	100	48.16	32.20	.165	-1.307
BIAS	1	99	43.47	30.42	.269	-1.116

The functional family relations are characterized by the optimal values of flexibility and cohesion. It means: slightly higher cohesion, until flexibility is not very expressed and in accordance with the life cycle of the family. In the age of adolescence, parents become more flexible, and positive family climate contributes to the frequent communication and free emotional expression. Flexibility in family arrangements exists, the boundaries are not too rigid, nor the division of roles. The Table 2 shows frequencies of families according to scores of flexibility and cohesion.

TABLE 2. DIVISION OF FAMILIES ACCORDING TO PROMINENCE OF FLEXIBILITY AND COHESION

	Cohesion			Total
Flexibility	low cohesion	optimal cohesion	high cohesion	
low flexibility	5	13	4	22
optimal flexibility	12	56	14	82
high flexibility	3	19	6	28
Total	20	88	24	132

Most families belong to the category of optimal cohesion and optimal flexibility (56). But we cannot neglect the fact that in 76 families some of the dimensions in family relationships are too high or too low.

The following table shows corelation between dimension of family relationships and emotional profile of the students. It turned out that cohesion does not play a significant role in formation of emotional profile, but flexibility is significantly associated with some emotional characteristics, according to Table 3.

TABLE 3. CORRELATION BETWEEN FAMILIY FLEXIBILITY AND COHESION AND EMOTIONAL PROFILE OF STUDENTS

	protection	orietation	deprivation	rejection	research
flexibility	-.281**	.292**	-.215*	.210*	-.305
	.003	.002	.024	.028	.001
cohezion					

**correlation is significant at the .01 level
* correlation is significant at the .05 level

DISCUSSION OF RESULTS

The results show that results of distributions of flexibility and cohesion are grouped about average values. In fact, family relations of students of the Social Sciences and Humanities are flexible. Intensity of flexibility is standard in many such families. In cohesion also, there is similar tendency for grouping results, although less than when it comes to flexibility. Mean values of these dimensions are closer to the maximum values, which means that families of examined students are more cohesive then some arbitrary normal distribution. In table 2 we can see there are a considerable number of families (56) with optimal flexibility and cohesion, which confirms our expectations for the first hypothesis. However, 76 families were assessed with increased or decreased values of examined dimensions. If we are aware of the fact that the level of cohesion is very important for family functioning, it will be encouraging information that there are 88 optimal cohesive families in our sample.

When it comes to the emotional profile, the most visible emotions are: research, acceptance and care, which is a partial confirmation of the second hypothesis. These dimensions also do not reach values above 60 percentile. Female student of psychology and pedagogy are curious people, who mostly know how to plan their time and are cautious, so they avoid situations that may lead them into trouble. Based on the correlation dimension of family relationships and emotional profile, we concluded that only flexibility contributes to the dimensions of emotional profile, not cohesion.

The obtained values indicate that protection, orientation, deprivation, rejection and research are significantly associated with the dynamics of family relationships and with a flexible or inflexible distribution of power and role in the family system. It means these emotions have a biological basis. But still, relationships in the family, distribution of power, domination and division of roles can cause more frequent and more intense manifestation of emotions. High flexibility reduces deprivation, research and control, and fear, and increases the spontaneity and rejection. The problem that occurs with this hypothesis is: what is the nature of relationship of flexibility and emotional profile? Increased flex-

ibility may induce some emotions or increase tolerance of emotion within the family system, but only with a limit that is acceptable as an optimal (from 40 to 60 percentile). In fact, what does it mean: the obtain correlation between flexibility and emotional profile? High values of flexibility indicate a lack of family structure and mutual chaotic relations. Each of the family members lives a separate life and there is no mutuality. The large differences in the expression of flexibility in the family produce differences in emotional expression. The small differences, in terms of flexibility, do not significantly contribute to differences in the emotional profile.

The next step in examining the role of flexibility was the grouping questionnaire in subgroups of examinee whose family relationships have valid characteristics of high and low flexibility. In sub-samples with high flexibility appeared similar emotional profile. Features of this profile are: high rejection and high orientation. The values of these two dimensions reach the level of above 70 percentile. Deprivation is accentuated above 70 percentile, but at the slightly smaller number of cases.
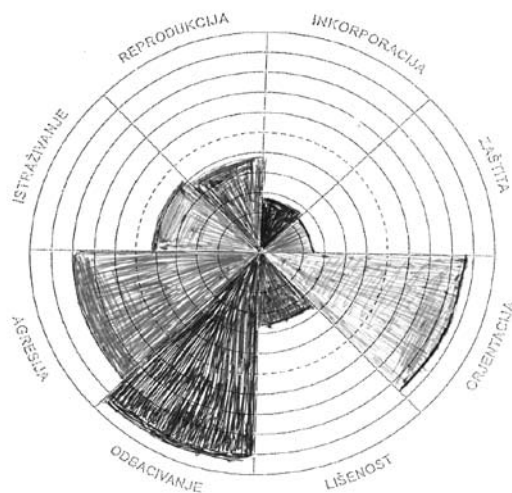
In sub-samples with low flexibility emotional profiles are diverse, although some of them have very strong deprivation and rejection (over 70 percentile), and low orientation, but protection doesn't exceed more than 70 percentile. Like reproduction, research as a dimension of emotional profile is very expressed in a few cases. Low flexibility, or in other words rigid family relation, is connected with the excessive level of deprivation, loneliness and depression. But despite this, protection and timidity isn't present that much.
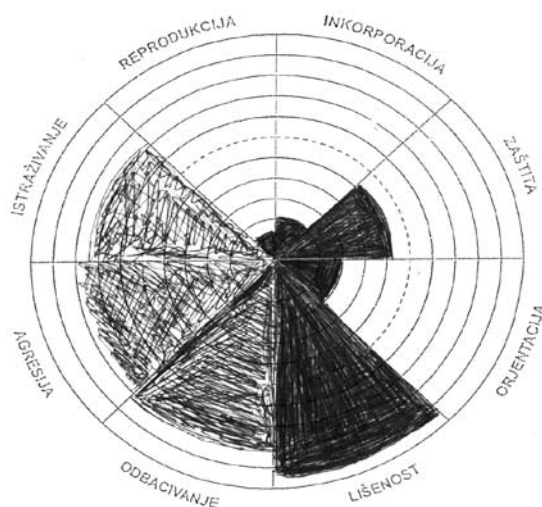
CONCLUSION

The results are not sufficiently precise. Further research should be focused on large sample of families with high or low values of flexibility, and analyzed emotional profile in selected families. It may be that high flexibility is followed by lines of characteristics, that we did not research and probably indicate problems in family interactions

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PARENT-CHILD COMMUNICATION AND TEENAGERS' SELF ESTEEM

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Abstract. The aim of the study was to explore the relationship between teenagers' perception on the level of conflict and communication with each of their parents and their level of self-esteem. Over one hundred Romanian high-school students were tested with a series of three questionnaires: Questionnaire for family conflicts, teenager version (Fuentes, Motrico, and Bersabe, 1999), self-esteem scale (Oubrayrie, de Leonardis, and Safont, 1994), and our own questionnaire for assessment of teenagers' perception on the communication level with each of their parents. Results indicated positive correlations between the perceived level of communication with parents and differential patterns for teenage boys and girls.

Keywords: parent-child communication; self-esteem; teenagers

INTRODUCTION

Adolescence is a transition period in which important physical, cognitive and emotional changes occur. These transformations are reflected in the relationships that the teenager has with his or hers parents and peers. Nevertheless, these changes are not abrupt in order to allow time to adjust for both parent and adolescent. Following the '60 generation gap as a subject of intense discussion, youth researchers didn't find empirical support for this idea. There is still a general sense that teens tend to spend more time in their room, with their peers, and away from family activities. Consequently, opportunities for communication diminish during this period of the child's life and conflict may occur. Still, the majority of adolescents believe that they have a lot to learn from their parents, whom they consider as being among their best friends, and with whom they can communicate quite well (van Wel, 1994). Although teenagers frequently ask their mothers for emotional support or advice on personal matters (O'Koon, 1997), teenagers in

the 15-20 age span have significantly less intense relationships with their parents, than either younger children or older youth (van Wel, 1994).

There are associations between poor teenager-parent communication and low self-esteem, problems in the individuation process, social integration difficulties, bad school results and aggression, and especially for boys (Isberg et al., 1989). Regarding conflict between parents and teenagers, results generally indicate a rather low rate of conflict between parents and their children (Motrico et al., 2001).

We wanted to see how teenagers perceive the communication relationship with both parents and also the perceived conflict that may emerge within these relationships.

The first objective of the study was to explore gender and age-group differences in teenagers' self-esteem and perceived parent-child interaction (communication and conflict). The second objective was to explore the links between adolescent's self-esteem and the perceived intensity of parent-child interaction (communication and conflict). We expected positive correlations between adolescent's self-esteem and the perceived quality of parent-child communication. Also, we expected negative correlations between adolescent's self-esteem and the perceived intensity of parent-child conflict. Finally, we expected negative correlations between parent-child communication and conflict.

METHODOLOGY

PARTICIPANTS

Participants to the study were 130 teenagers, 48 boys and 82 girls, age 15 to 19 (M = 16.4; SD = 1.13), grades 9 to 12 at "Mihai Viteazu" High School, Bucharest.

INSTRUMENTS

The following instruments were used: Échelle Toulousaine d'Estime de Soi (ETES; Oubrayrie, de Léonardis, and Safont, 1994; 60 items); Cuestionario de conflictos (Motrico, Fuentes, Bersabé, 2001; 11 items, Cronbach's Alpha = 0.80); Communication with Parents Questionnaire (custom instrument; 36 items; Cronbach's Alpha = 0.78).

RESULTS

Student's *t* tests revealed significantly more perceived adolescent–mother interaction (both communication and conflict; Table 1). Contrary to common assumption that the father is the authoritarian figure against which the teenagers individuate themselves (regardless of sex) we found that there was a higher perceived

conflict with the mother. This result may be due to the fact that we tend to be in conflict with those who are closest (higher perceived communication as well) or that the father is less involved in the modern family and viewed less as a figure of authority.

TABLE 1. PERCEIVED ADOLESCENT−PARENT INTERACTION (COMMUNICATION AND CONFLICT)

Communication	Mother	M = 50.61	t(129) = 5.24
	Father	M = 45.66	p < .001
Conflict	Mother	M = 10.53	t(129) = 4.30
	Father	M = 8.56	p < .001

A two-way ANOVA revealed a significant interaction between the effects of adolescent's gender and age group on adolescent-mother communication (Table 2). There is a significant drop in the quality of perceived girl-mother communication between junior high school and senior high school, but no significant increase in perceived conflict (Table 3; Figure 1). This is probably caused by the likely emergence of sexual behaviors and the perceived negative response on the part of the mother (fear of teenage pregnancy, STD, shame, etc.). There were no similar trends regarding adolescent boys or the perceived interaction with the father. This could be due to the fact that there is not such a close communication connection (see gender roles and stereotypes) between boys and their fathers and due to the more permissive view on male sexuality around adolescence.

TABLE 2. TWO-WAY ANALYSIS OF VARIANCE FOR COMMUNICATION WITH MOTHER AS A FUNCTION OF ADOLESCENT GENDER AND AGE GROUP

Variable and source	df	MS	F	eta sq
Comm w. mother				
Gender	1	362.63	3.89	
Age Group	1	211.56	2.27	

TABLE 2. CONT'D

Variable and source	df	MS	F	eta sq
Gender * Age Group	1	411.31	4.41*	0.03
Error	126	93.16		

Note: *p < 0.05

TABLE 3. MEANS AND STANDARD DEVIATIONS FOR COMMUNICATION WITH MOTHER AS A FUNCTION OF ADOLESCENT GENDER AND AGE GROUP

Comm w. mother	Grades 9-10			Grades 11-12			Total	
	n	M	SD	n	M	SD	M	SD
Boys	25	47.56	10.58	23	48.60	10.44	48.06	10.42
Girls	48	54.75	7.39	34	48.38	11.11	52.10	9.59
Total	73	52.28	9.21	57	48.47	10.75	50.61	10.05

Estimated Marginal Means of Comm w. mother
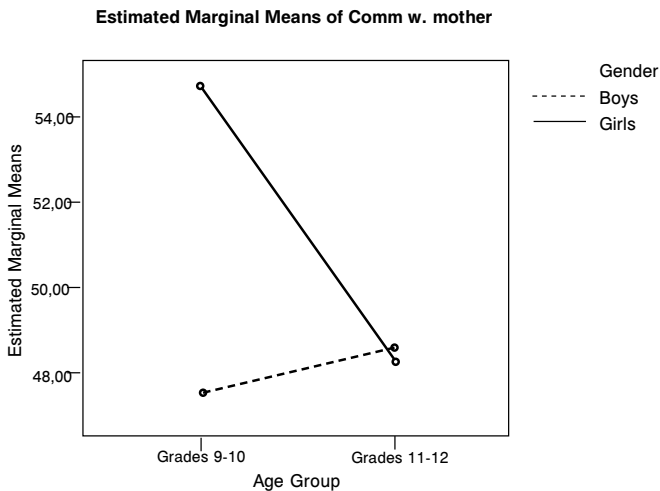
FIGURE 1. PERCEIVED ADOLESCENT-MOTHER COMMUNICATION AS A FUNCTION OF GENDER AND AGE GROUP

Regarding adolescent's self-esteem, there was a significant positive correlation between adolescent's self-esteem and perceived quality of adolescent-parent interaction (Table 4). Close perceived communication relationship between teenager and parent could help build a positive self esteem. There was a significant negative correlation between adolescent's self-esteem and the perceived intensity of adolescent-parent conflict. There were significant positive correlations between perceived quality of communication with both parents or perceived intensity of conflict with both parents. Also, there were significant negative correlations between the perceived quality of communication with both parents and the perceived intensity of conflict with both parents. This could be due to the parents being perceived as a unit and thus communication or conflict with one of them could correlate with communication or conflict with the other.

TABLE 4. CORRELATIONS OF THE STUDY VARIABLES FOR ALL PARTICIPANTS

Variable and range	1	2	3	4	5
1. Self-esteem	1.00				
2. Comm w. mother	0.39***	1.00			
3. Comm w. father	0.31***	0.51***	1.00		
4. Confl. w. mother	-0.32***	-0.51***	-0.19*	1.00	
5. Confl. w. father	-0.23**	-0.38***	-0.36***	0.58***	1.00

Note. *p < 0.05, **p < 0.01, ***p < 0.001. For the correlations: N = 130.

Performing separate analyses for boys and girls, similar trends were revealed. There is no bias toward one of the parents. Generally, a low level of conflict with both parents was recorded.

TABLE 5. CORRELATIONS OF THE STUDY VARIABLES FOR BOYS (ABOVE THE DIAGONAL) AND GIRLS (BELOW THE DIAGONAL)

Variable and range	1	2	3	4	5
1. Self-esteem	-	0.42**	0.37**	-0.44**	-0.40**
2. Comm w. mother	0,34**	-	0,47**	-0,67***	-0.54***
3. Comm w. father	0.28**	0.54***	-	-0.24	-0.35*
4. Confl. w. mother	-0.24*	-0.38***	-0.17	-	0.65***
5. Confl. w. father	-0.13	-0.30**	-0.37**	-0.54***	-

Note. *p < 0.05, **p < 0.01, ***p < 0.001. For the correlations: N-boys = 48; N-girls = 82.

CONCLUSION

The study aimed to explore gender and age-group differences in teenagers' self-esteem and perceived parent-child interaction. Also, the study aimed to explore the links between adolescent's self-esteem and the perceived intensity of parent-child interaction. There was significantly more perceived adolescent-mother interaction (both communication and conflict). This may be due to the closer relationship and more involved attitude that the mother still holds in the modern family. This closeness means more perceived qualitative mother–adolescent communication, but also allows the occurrence of conflict related domestic issues. We expected that perceived communication with the father would be lower than with the mother, but we also expected higher rates of adolescent–father conflict,

the father being traditionally presented as the authoritarian figure of the family, the one the teenagers rebelled against while trying to resolve their identity crisis or their need of more autonomy. The lower scores of perceived adolescent-father conflict could be related to a more detached or absent role the father plays within the family. Tired or dethroned head of the family, the interaction with the father is perceived as less intense that the interaction with the mother, both on the communication and conflict scales. However, there is a significant drop in the quality of perceived girl-mother communication between junior high school and senior high school, but no significant increase in perceived conflict. This is most probably linked to the emergence of sexual behaviors. There was a significant positive correlation between adolescent's self-esteem and perceived quality of adolescent-parent interaction. Also, there was a significant negative correlation between adolescent's self-esteem and the perceived intensity of adolescent-parent conflict.

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SOCIAL SKILLS TRAINING FOR CHILDREN WITH ADHD

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Abstract. *This paper reports on a study of the impact of a social skills training program on the social adjustment of children with ADHD. Fourteen boys aged between eight and 12 years participated in the program, and fourteen controls remained on a waiting list. All participants were assessed on various aspects of their social behaviour and social skills before the program began, and two weeks following completion. The variables assessed included quality of social skills, frequency of social interactions, social knowledge, social communication, social goal setting, and sociometric status. While the members of the treatment group showed significant improvements in the frequency of social interactions, negative social communication, and social goal setting in comparison to the control group, they did not improve on the other measures more than the controls. It is argued that despite the limitations of this study, and the mixed findings, social skills training offers potential for improving the social skills and socio-metric status of children with ADHD.*

Keywords*: ADHD, social skills training, peer relationships, social behavior.*

INTRODUCTION

While much research has focused on the dysfunctional social behaviours of children with ADHD, more recently the focus has been on the processes underlying them. Specifically, this research has investigated communication styles, social knowledge and performance, and social goal setting of ADHD children, and has found that children with ADHD have poor communication skills, including infrequent verbal communication, inappropriate communication, and uncooperative communication (Bickett & Milich, 1990; Cunningham & Siegal, 1987; Landau &

Milich, 1988). They respond less frequently to verbal initiations made by peers, often to the point of disregarding peer queries (Landau & Milich, 1988; Whalen, Henker, Buhrmester, Hinshaw, Huber, & Laski, 1989). They also tend to be less effective when shifting communication roles from transmitter to recipient (Bickett & Milich, 1990).

With regard to social knowledge and performance, Grenall, Glass, and Katz (1987) suggested that children with ADHD have deficits in *both* social knowledge and social performance. In terms of social knowledge deficits, the children with ADHD in Grenall et al's study were deficient in their knowledge of social strategies for maintaining a relationship. This difference was attributed to a relative social immaturity in ADHD children in that the initiation of relationships (e.g., spending time with peers, inviting peers to play) is relatively simple compared with the more complex knowledge required for maintaining a friendship (e.g., conflict resolution, sharing). In terms of performance deficits, the children with ADHD demonstrated social behaviour that was less friendly and more assertive during conflict, which also suggested an immaturity in the performance of the more complex social behaviour required during conflict resolution. Thus, while social performance deficits exist in children with ADHD, social knowledge deficits may in fact underlie these.

Social goal setting, an individual's aim during social interaction, serves to influence and direct their subsequent social behaviour (Crick & Dodge, 1994; Ladd, 1999; Rose & Asher, 1999). Children with ADHD tend to report goals for social interaction that are less sociable and more self-gratifying than those reported by non-ADHD children (Renshaw & Asher, 1983). For example, ADHD children have been found to endorse social goals related to domination, aggression, and sensation seeking significantly more than non-ADHD children, and this may have a negative impact on their popularity amongst peers (Melnick & Hinshaw, 1996).

Such a deconstruction of the peer rejection and social skills deficits identified in earlier discussions provides an opportunity to focus on a more specific adjunctive psychological intervention to psychostimulant medication, one that has a direct focus on improving social skills, namely social skills training (SST). SST provides a socially rich environment that emphasises learned behaviour and cognitive skills that are associated with proficient social functioning (e.g., Sheridan, 1997). It maintains a balance between achieving a positive outcome for the individual (personal goal), while preserving the rights of others in an interpersonal context (prosocial goal; Peterson, 1992).

Studies employing SST for children with ADHD have provided some positive outcomes. In one study, for example, Cousins and Weiss (1993) found that following treatment, the children demonstrated an increase in (i) knowledge of strategies for effective social behaviour, (ii) appropriate social behaviour in role-plays and planned social activities, (iii) general improvement in personal conduct including

manners and rule following, (iv) an increased ability to get along with other group members, (v) increased spontaneity in conversations with group members, and (vi) some transfer of these improvements to home and school settings. However, rejection by peers at school persisted following treatment and the researchers hypothesised that this was due to the preservation of children's 'reputation' of having ADHD.

In another study, Sheridan and colleagues (1996) implemented SST with a sample of ADHD children who were concurrently taking psychostimulant medication. Their findings indicated that, overall, the children improved on most of the target social skills as evaluated by the self-report, parent and teacher reports, and also by significant changes in behavioral observations. These improvements were most evident in skills for social entry and they were maintained over time. Importantly, behavioral changes were considered socially valid and were generalized to the playground setting for some participants. However, although improvements in skills were evident, they were highly variable across participants.

Pfiffner and McBurnett (1997) also implemented a SST program that focused on coaching in social skills, motivation to increase performance quality, and awareness of verbal and non-verbal social cues. Results indicated that the SST with or without the concurrent parent group were both superior to the waitlist control group in terms of increasing social skills knowledge, improving social interactions, and home behaviour as evidenced by parent ratings. Further, these treatment effects were maintained at four-months following treatment. Generalisation of these improvements in social skills to the school setting was reported for the SST plus parent group only.

Pfiffner and McBurnett's (1997) findings highlight the potential of SST for children with ADHD and suggest that their SST program was successful due to its particular focus on social skills established as deficient in children with ADHD. Importantly, the children in their study were not concurrently receiving psychostimulant medication, further highlighting the potential influence of SST with this clinical population. Given the established effects of psychostimulant medication in facilitating the reduction of the primary symptoms, the likely effects of a carefully designed and implemented SST, such as that of Pfiffner and McBurnett, may prove even more profound if used in conjunction with psychostimulant medication.

Overall, the research has indicated that SST can provide the opportunity for children with ADHD to significantly improve their social skills in an environment that is socially rich and, furthermore, potentially enjoyable. The purpose of this study was to address the social functioning and peer relations of children with ADHD through the implementation of a specifically designed SST program, used in conjunction with the standard treatment of psychostimulant medication. The aim was to provide a comprehensive treatment approach to target the complete

range of deficits experienced by children with ADHD. Outcome measures used were selected from the range of social deficits typical in children with ADHD, drawn from research discussed earlier.

We hypothesised that the ADHD participants in the treatment group, who underwent the SST in conjunction with their psychostimulant medication, would show significant improvements in the following target social variables subsequent to the nine-week SST treatment course, while the waitlist control group continuing psychostimulant medication only, would not. The target social variables were:

(i) Quality of social skills as assessed by parent and teacher ratings of participants on the Social Skills Rating System (Gresham & Elliot, 1990) and the Strengths and Difficulties Questionnaire (Goodman, 1997).

(ii) Frequency of social interactions, which was measured by behavioural observations of participants in the classroom.

(iii) Social communication in terms of increasing positive communication and decreasing negative communication. This was measured by behavioural observations of participants in the classroom.

(iv) Sociometric status, which was measured through the Sociometric Activity and behavioural observations of the participants.

(v) Social knowledge in that their social strategies would be less impulsive and more friendly, relationship-enhancing, assertive, and effective. This was measured through the Social Knowledge Interview (Geraci & Asher, 1980).

(vi) Social goal setting in that their goals for social interactions would be more relationship-enhancing, moral, and tension reductive, and also less controlling, retaliatory, and instrumental. Social goal setting was measured through the Goal Assessment Questionnaire (Rose & Asher, 1999).

METHOD

PARTICIPANTS

Twenty-eight boys aged between 8 and 12 years participated in this study. All participants had a primary diagnosis of ADHD Combined Type, determined by psychiatric assessment, and were attending a child and adolescent mental health service for treatment. They were referred to the social skills training program by their treating clinicians, and were randomly assigned to a treatment group (n=14, $M = 10.87$ years, $SD = 1.16$ years), and a waitlist control group (n = 14, $M = 9.57$ years, $SD = 1.28$ years). All participants in the study had been treated with psychostimulant medication (Ritalin or Dexamphetamine) for at least three months

prior to referral to the study, and continued with their medication over the course of the study.

MEASURES

The measures used in the present study were specifically selected to assess the target social variables proposed to underlie the social problems of children with ADHD: (i) quality of social skills, (ii) frequency of social interactions, (iii) social communication, (iv) sociometric status, (v) social knowledge, and (vi) social goal setting.

The Social Knowledge Interview (SKI; Geraci & Asher, 1980). The SKI assesses social knowledge strategies by asking respondents to imagine that they are in hypothetical social situations, which are depicted by cartoon sketches on A4 cards presented to the respondent one at a time. The researcher reads out a corresponding verbal dialogue. Each card assesses one of three types of behaviours in social situations: the initiation of friendship, relationship maintenance, and conflict resolution. Respondents are asked to describe what they would do in each of the 16 hypothetical situations and are given scores based on 3 process variables and 2 outcome variables. Process variables measure the dimensions of interaction style and are rated on each dimension as to the degree of friendliness-unfriendliness, impulsiveness-nonimpulsiveness, and assertiveness-nonassertiveness. Outcome variables measure the likely consequences of the solutions given to the items. The two outcome variables are effective-noneffective and relationship enhancing-non-relationship enhancing. An effective solution is a response that is amenable to the stipulations of the situation and is likely to solve the indicated problem. A relationship-enhancing response is one that is likely to preserve or enhance a positive relationship between the two children or the child and the group. The ratings for each outcome and process variable for each content category were made in Geraci and Asher's (1980) research by two independent judges. The reliability of the judges' ratings on each of the process and outcome variables was examined by tabulating the correlation between the judges' ratings on individual items (see Geraci & Asher, 1980).

Goal Assessment Questionnaire (GAQ; Rose & Asher, 1999). The GAQ was used in this study to assess the types of goals respondents endorse in different social contexts. The GAQ contains 30 written items depicting different hypothetical social situations and of the 30, six situations represent each of the five following contexts; *spirit of equality of task, exclusivity, helping a friend in need, managing disagreement, and reliable partner*. The examiner reads each hypothetical situation to the respondents and asks them to imagine that they are in that particular situation. The examiner then asks the respondent, "What would your goal be?" and verbally presents goal options of six types: relationship-enhancing, moral, retaliation, instrumental, tension reduction, and control. Respondents are asked to

rate each goal type on a six-point Likert scale according to how much that would be their goal. Ratings range from 0 = *Not At All* to 5 = *Very Much*. The goal types are presented in a random order for each item. The ratings that respondents assign to each goal type for each item in each context are added to obtain a total for each goal type in each context. Respondents' scores are tallied for each goal type across the 30 hypothetical situations, which provide information about which goal type the respondent is likely to endorse in a social situation, regardless of the context type. Thus, respondents receive five scores ranging from 30-150 for each of the five goal types, where a higher score corresponds to a greater likelihood that a particular goal would be endorsed.

As participants in this study had limited attention and freedom from distraction, only 15 of the original 30 hypothetical situations were used in each assessment phase. Thus, the five scores range between 15 and 75. To ensure participants received the same number of items for each of the five contexts and also to ensure that participants' scores represented the nature of their social goals in a variety of social situations, the 30 items were divided into two sets defined by odd and even item numbers. Participants were randomly assigned to the odd or even GAQ group in the first assessment and were accordingly given the opposite odd or even group in the follow-up assessment. Although the reliability and validity of the GAQ has not yet been assessed it was deemed by the researchers to be the only relevant and appropriately specific measure of children's social goals.

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). The parent and teacher versions of the SDQ were used in this study. The SDQ is a 25 item questionnaire that assesses children on 5 sub-scales: hyperactivity, emotional symptoms, conduct problems, peer problems, and prosocial behaviours. The Prosocial Scale of the SDQ was used in this study to assess participants' quality of social skills, and the Peer Problems scale was used in this study as a measure of participants' sociometric status. The respondent rates each of the 25 items in terms of the degree to which the rater believes the behaviour to be true of the individual over the last six months. Items are rated as follows: 0 = *Not True*, 1 = *Somewhat True,* and 2 = *Certainly True.*

Scores are summed to provide a total score ranging from 0-10 for each of the sub-scales. The SDQ has been established as a valid and reliable measure of child psychopathology in Sweden (Koskelainen, Sourander, & Kaljonen, 2001; Smedje, Broman, Hetta, & von Knorring, 1999), England (Goodman, Ford, Simmons, Gatward, & Meltzer, 2001), and the Netherlands (Muris, Meesters & van den Berg, 2003).

The Social Skills Rating System (SSRS; Gresham and Elliot, 1990). The SSRS – Parent and Teacher forms were used in this study as a means of assessing the quality of social skills in participants. The 70-item parent form and 57-item teacher form of the SSRS sample the three areas of social skills, problem behaviours,

and academic competence. The social skills scale of the SSRS assesses common behaviours from the sub-scales of *co-operation*, *assertion*, *responsibility*, and *self-control*. The SSRS uses both frequency and importance ratings, however, only the frequency ratings were relevant to this study. Frequency ratings are 0 = *Never*, 1 = *Sometimes*, and 2 = *Very Often*. Scores for each sub-scale of the social skills scales are determined by adding the raw scores for each of the social skills sub-scales. The sub-scale scores are then summed to provide a total raw score for the social skills scale and these are translated into one of three descriptive behaviour levels, derived from cut-off points that are based on the performance of the SSRS standardisation sample. In order to provide a standard interpretive base across all forms and scales, the total raw score for the social skills sub-scale is converted to a standard score and percentile rank. Gresham and Elliot (1990) have conducted research studies designed to assess the validity of their scale. They reported that the SSRS is a valid measure for screening and categorising children based on social skills. The authors have also provided reliability data for the SSRS and its sub-scales (see Gresham & Elliot, 1990).

The Peer-rated Sociometric Activity was designed and used in this study to provide a measure of participants' social standing amongst peers. The Sociometric Activity required the class teacher of each participant to request that each student in the class (including the participant) complete a form indicating the first names only of the children that they played with at school over the last week. The number of class peers who record the participant's name on their form determines the sociometric status of the participant.

Direct behavioural observations were conducted to supplement the data gathered from the other measures used to assess the target social variables. For each participant at each time of assessment, one hour observation sessions were carried out on two school days at least one week apart. Where possible, each participant was observed in both a structured task (e.g., listening to a peer give a presentation or working on a work sheet) and an unstructured task (e.g., free time in the classroom or a sporting game) by two observers.

Observations were recorded to reflect the specific variables of interest and were recorded according to the following operationalised variables: frequency of social interactions, sociometric status, social knowledge, and social communication. Overall, for each participant, a total of 240 minutes of observational data was collected over the two assessment periods. Reliability co-efficients for ratings between observers ranged from 0.51 to 1.

PROCEDURE

Prior to commencement of the study, appropriate ethical approval to conduct the study was obtained. The intervention consisted of two SST groups, each with 7

participants and a corresponding waitlist control groups. All participants were assessed in the four weeks prior to the SST program and were re-assessed within two weeks following the completion of the SST.

THE TREATMENT

There were 7 participants in each SST group. Group leaders were the first author of this paper and a senior psychologist from the child and adolescent mental health facility at which the program was offered. The SST program was conducted weekly for one hour, over nine weeks.

A modified version of Sheridan's (1995) SST program was used in this study (see Table 1), with the modifications aimed at making the program more appropriate and relevant for the participants. For example, the way in which the target social skills were rehearsed and practiced was modified to suit the needs of this ADHD population. As children with ADHD are typically inattentive, easily distracted, and overactive, the program was modified to contain many activities and tasks designed specifically to keep the participants active, interested, and involved.

TABLE 1. OUTLINE OF WEEKLY SKILLS IN THE SOCIAL SKILLS PROGRAM

Week Number	Skills Taught
1	*Social Entry* Body Basics/ Starting a Conversation
2	Joining In
3	*Maintaining Interactions* Recognizing & Expressing Feelings
4	Having a Conversation
5	Playing Cooperatively
6	*Problem Solving* Solving Problems
7	Resolving Arguments
8	Using Self-Control/ Accepting No
9	Being Left Out/Program Summary

There was significant emphasis on applying activities to facilitate the flow of real life social problems into the therapeutic setting, with the aim of promoting the generalisation of skills to the natural social environment. This component was considered to be a strength of this study and a significant improvement on past research of the same nature.

RESULTS

The data were analyzed using SPSS Version 10.0. Data screening was conducted by group and separately for the initial assessment phase and the follow-up assessment phase. Univariate outliers were recoded to ±1 the next nearest value and the assumptions of univariate and multivariate normality were satisfied at the $p < .001$ level (Tabachnick & Fidell, 1996). Modest violations of skewness in the dependent variables were accepted as they were considered reflective of the clinical nature of the sample (Tabachnick & Fidell).

A small number of dependent variables violated the assumption of homogeneity of variance-covariance, however, these were accepted given the stringent nature of this test and also the equality of sample sizes across the cells (Tabachnick & Fidell, 1996). The assumptions of linearity and homoscedacity were reasonably satisfied.

A series of Repeated Measures (RM) MANOVAs were conducted to measure changes in the six variables of interest: (i) quality of social skills, (ii) frequency of social interactions, (iii) social communication, (iv) sociometric status, (v) social knowledge, and (vi) social goal setting.

QUALITY OF SOCIAL SKILLS

Table 2 summarises the scores for each group of participants on the measures of quality of social skills pre– and post-intervention. To investigate any situational differences in the quality of social interactions these were analysed separately according to whether they were parent-rated or teacher-rated.

TABLE 2. MEANS AND STANDARD DEVIATIONS (IN BRACKETS) FOR QUALITY OF SOCIAL SKILLS MEASURES BY GROUP

	Treatment group (n=14)		Control Group (n=14)	
	Pre	Post	Pre	Post
SDQ: PR Prosocial	5.36 (1.78)	6.07 (1.54)	4.86 (2.50)	4.92 (1.90)
SSRS: PR Social Skills	70.29 (6.81)	74.86 (8.74)	67.93 (13.84	71.79 (12.31)
SSRS: PR Cooperation	6.43 (2.65)	6.35 (2.13)	5.57 ((4.65)	6.29 (4.21)
SSRS: PR Self-Control	5.85 (2.18)	7.29 (2.46)	5.29 (3.07)	6.14 (3.25)
SSRS: PR Assertiveness	10.71 (2.43)	11.0 (2.32)	9.43 (3.00)	9.57 (1.70)
SSRS: PR Responsbility	9.00 (2.39)	10.21 (3.12)	7.64 (3.79)	9.07 (3.17)
SDQ: TR Prosocial	4.71 (1.73)	6.28 (2.70)	3.57 (2.34)	3.64 (2.68)
SSRS: TR Social Skills	85.43 (13.43)	94.14 (15.18)	79.36 (11.85)	81.57 (9.91)
SSRS: TR Cooperation	10.29 (4.89)	11.93 (4.45)	9.64 (4.09)	9.36 (4.40)
SSRS: TR Self-Control	9.21 (3.83)	12.21 (3.19)	6.07 (4.16)	8.00 (5.13)
SSRS: TR Assertiveness	11.57 (3.39)	11.57 (3.39)	7.43 (3.00)	8.21 (4.95)

PR = parent rated; TR= teacher rated

(i) *Parent-rated*

The analyses indicate that the treatment group demonstrated improvements in the quality of its social skills (parent-rated) over time, however, this was not significantly different to the control group (Pillai's Trace = .181, $F(6, 21)$ = .773, $p > .05$, η^2 =.181). Both the treatment and control groups significantly improved the quality of its social skills over time (Pillai's Trace = .488, $F(6, 21)$ = 3.33, $p < .05$, η^2 = .488) in terms of total social skills ($F(1)$ = 12.048, $p < .01$, η^2 = .317), self-control ($F(1)$ = 18.29, $p < .01$, η^2 = .229), and responsibility ($F(1)$ = 10.612, $p < .01$, η^2 = .229).

(ii) *Teacher-rated*

Although the treatment group demonstrated improvements in the quality of its social skills (teacher-rated) over time, this was not significantly different to the control group (Pillai's Trace = .175 $F(5, 22)$ = .931, $p > .05$, η^2 = .175). Contrary to expectation, both the treatment and control groups improved the quality of their social skills over time (Pillai's Trace = .448, $F(5, 22)$ = 3.572, $p < .05$, η^2 = .448) in displaying more social skills in general ($F(1)$ = 6.365, $p < .05$, η^2 = .197), more self-control ($F(1)$ = 10.165, $p < .01$, η^2 = .281), and being more assertive ($F(1)$ = 7.453, $p < .05$, η^2 = .223).

FREQUENCY OF SOCIAL INTERACTIONS

The scores for participants derived from observations of frequency of social interaction are summarised in Table 3. Following participation in the SST program, the treatment group demonstrated a significant improvement in the frequency of its social interactions, relative to the control group (Pillai's Trace = 0.324, $F(2, 25)$ = 5.99, $p < .01$, η^2 = .049). Specifically, the treatment group significantly increased the frequency of initiating social interactions with peers, relative to the control group ($F(1)$ = 7.239, $p < .05$, η^2 = .218).

TABLE 3. MEANS AND STANDARD DEVIATIONS (IN BRACKETS) FOR FREQUENCY OF SOCIAL INTERACTIONS MEASURE BY GROUP

	Treatment group (n=14)		Control Group (n=14)	
	Pre	Post	Pre	Post
Total Responding Interaction	21.00 (5.84)	28.79 (5.07)	22.79 (7.05)	24.71 (10.31)
Total Initiating Interaction	16.79 (9.70)	30.43 (19.70)	31.50 (15.09)	25.71 (14.75)

QUALITY OF SOCIAL COMMUNICATION

To investigate any differences in the quality of participants' communication, observed interactions were recorded as either positive or negative communication. Accordingly, the data relating to positive communication and negative communication were investigated separately. Table 4 summarises the scores for each group on the measures of social communication pre– and post-intervention.

TABLE 4. MEANS AND STANDARD DEVIATIONS (IN BRACKETS) \FOR SOCIAL KNOWLEDGE MEASURES BY GROUP

	Treatment group (n=14)		Control Group (n=14)	
	Pre	Post	Pre	Post
Friendliness	43.01 (6.78)	48.09 (10.64)	38.26 (9.46)	35.36 (13.49)
Impulsivity	39.5 (5.40)	44.07 (4.96)	35.26 (8.67)	42.60 (26.52)
Assertiveness	39.14 (6.06)	42.83 (5.21)	36.46 (5.55)	36.96 (8.99)
Effectiveness	64.49 (11.62)	72.00 (9.06)	53.32 (10.68)	56.24 (8.98)
Relationship-enhancing	68.29 (14.97)	70.82 (9.86)	56.21 (13.71)	53.36 (12.91)
Situationally appropriate Situationally inappropriate	17.29 (14.41) 8.57 (3.96)	34.93 (21.99) 7.07 (5.28)	18.43 (11.14) 7.14 (4.96)	15.50 (11.16) 5.85 (3.70)

(i) *Positive communication*

The analyses indicate that although the treatment group demonstrated improvement in its observed positive communication, this was not significantly different to the control group (Pillai's Trace = .303, $F(4, 23) = 2.495$, $p > .05$, $\eta^2 = .303$). Alternatively, contrary to expectation, both the treatment and control groups improved their social communication over time (Pillai's Trace = .488, $F(4, 23) = 5.484$, $p < .01$, $\eta^2 = .488$) in terms of more frequently providing positive non-verbal responses to peers ($F(1) = 15.393$, $p < .01$, $\eta^2 = .372$).

(ii) *Negative communication*

The analyses indicate that following participation in the SST program, the treatment group demonstrated a significant improvement in their negative communication relative to the control group (Pillai's Trace = .332, $F(4, 23) = 2.858$, $p < .05$, $\eta^2 = .332$). Specifically, over the course of the SST program the treatment group significantly decreased their negative non-verbal responses to peers relative to the control group ($F(1) = 8.691$, $p < .01$, $\eta^2 = .251$).

SOCIOMETRIC STATUS

Table 5 summarises the scores for each group on the measures of sociometric status pre– and post-intervention. The analyses indicate that the treatment group demonstrated improvements in its sociometric status over time, but contrary to expectation, so too did the control group (Pillai's Trace = .372, $F(8, 19)$ = 1.405, $p > .05$, η^2 = .372). Specifically, the significant effect over time (Pillai's Trace = .718, F(8, 19) = 6.053, $p < .01$, η^2 = .718) related to the treatment group and control group receiving more nominations as playmates by peers (as measured by the Sociometric Activity; $(F(1)$ = 8.817, $p < .01$, $\eta2$ = .718), were less solitary ($F(1)$ = 18.931, $p < .001$, η^2 = .421), had more positive verbal contact with peers ($\underline{F}(1)$ = 8.945, P<.01, η^2 = .256), and had less peer problems in general ($F(1)$ = 7.143, $p < .05$, η^2 = .152).

TABLE 5. MEANS AND STANDARD DEVIATIONS (IN BRACKETS) FOR SOCIOMETRIC STATUS MEASURES BY GROUP

	Treatment group (n=14)		Control Group (n=14)	
	Pre	Post	Pre	Post
Sociometric Activity	27.71 (15.21)	39.30 (18.24)	25.83 (15.99)	41.33 (20.90)
Observations				
Solitary	13.93 (6.94)	6.71 (3.56)	14.43 (10.93)	8.64 (6.34)
Positive Verbal	9.86 (4.88)	9.29 (5.73)	17.21 (10.67)	8.64 (4.91)
Positive Non-Verbal	3.79 (2.42)	3.07 (2.73)	4.43 (4.77)	5.36 (3.91)
Negative Verbal	5.79 (4.21)	2.71 (3.04)	5.07 (3.41)	5.79 (5.03)
Negative Non-Verbal	2.50 (1.79)	2.86 (2.98)	3.14 (2.63)	5.71 (4.79)
SDQ Peer Problem				
PR	6.14 (1.23)	5.36 (2.06)	5.21 (2.04)	4.57 (1.09)
TR	4.14 (2.11)	3.93 (1.90)	3.64 (1.91)	3.79 (1.81)

PR = parent rated
TR= teacher rated

SOCIAL KNOWLEDGE

Table 6 summarises the scores for each group on the measures of social communication pre– and post-intervention. The analyses indicate that although the treatment group demonstrated an improvement in social knowledge relative to the control group over time, this was not significant (Pillai's Trace = .341, $F(7, 20)$ = 1.48, $p > .05$, η^2 = .341). However, contrary to expectation, both the treatment and control groups improved social knowledge over time (Pillai's Trace = .517, $F(7, 20)$ = 3.058, $p < .05$, η^2 = .517) in terms of their social strategies being friendlier, more effective, and more relationship-enhancing ($F(1)$ = 9.05, $p < .01$, η^2 = .258). The analysis (Pillai's Trace = .581, $F(7, 20)$ = 3.96,$p < .01$, η^2 = .581) also suggested

that the social knowledge of the treatment group was overall more friendly ($F(1)$ = 6.49, $p < .01$, η^2 =.20) , effective ($F(1) = 15.48$, $p < .001$, $\eta^2 = .373$), and relationship-enhancing ($F(1) = 11.558$, $p < .01$, $\eta^2 = .156$).

TABLE 6. MEANS AND STANDARD DEVIATIONS (IN BRACKETS) FOR SOCIAL KNOWLEDGE MEASURES BY GROUP

	Treatment group (n=14)		Control Group (n=14)	
	Pre	Post	Pre	Post
Friendliness	43.01 (6.78)	48.09 (10.64)	38.26 (9.46)	35.36 (13.49)
Impulsivity	39.5 (5.40)	44.07 (4.96)	35.26 (8.67)	42.60 (26.52)
Assertiveness	39.14 (6.06)	42.83 (5.21)	36.46 (5.55)	36.96 (8.99)
Effectiveness	64.49 (11.62)	72.00 (9.06)	53.32 (10.68)	56.24 (8.98)
Relationship-enhancing	68.29 (14.97)	70.82 (9.86)	56.21 (13.71)	53.36 (12.91)
Situationally appropriate	17.29 (14.41)	34.93 (21.99)	18.43 (11.14)	15.50 (11.16)
Situationally inappropriate	8.57 (3.96)	7.07 (5.28)	7.14 (4.96)	5.85 (3.70)

SOCIAL GOAL SETTING

With regard to social goal setting, the findings of the multivariate analyses indicate that following participation in the SST program, the treatment group demonstrated a significant improvement (Pillai's Trace = 0.479, $F(6, 21) = 3.215$, $p < .05$, $\eta^2 = .479$). Specifically, over the course of the SST program, the treatment group's social goals became more moral, more relationship-enhancing, and less retaliatory. The control group also improved, but the analysis revealed that the social goals of the treatment group were overall at T1 and T2 (Pillai's Trace = .470, $F(6, 21) = 3.105$, $p < .05$, $\eta^2 = .470$), more relationship-enhancing ($F(1) = 13.688$, $p < .01$, $\eta^2 = .345$) and less retaliatory ($F(1) = 6.899$, $p < .05$, $\eta^2 = .210$) than the control group. Table 7 summarises the scores for each group on the measures of social goal setting pre– and post-intervention.

TABLE 7. MEANS AND STANDARD DEVIATIONS (IN BRACKETS) FOR SOCIAL GOAL SETTING MEASURE BY GROUP

	Treatment group (n=14)		Control Group (n=14)	
	Pre	Post	Pre	Post
Tension Reduction	45.00 (17.72)	40.43 (16.07)	43.43 (21.77)	40.93 (16.83)
Retaliation	33.07 (15.54)	23.29 (11.19)	40.86 (23.79)	49.43 (22.19)
Control	47.29 (17.38)	41.71 (14.41)	50.79 (22.31)	46.93 (23.63)
Instrumental	49.36 (15.56)	47.36 (16.51)	44.00 (20.53)	49.57 (23.08)

SUMMARY OF FINDINGS

To summarise these findings, overall there were significant improvements in the quality of social skills at home and school, positive social communication, sociometric status, and social knowledge for both groups. In terms of improvements over and above those of medication only, the SST facilitated changes in the treatments group's frequency of social interactions, which was related to more positive communication and less negative communication, and also social goal setting. In relation to differences between the social functioning of the two groups at both T1 and T2, the treatment group was found to have more

DISCUSSION

This study set out to evaluate the efficacy of SST as a means of addressing the social deficits argued to be associated with poor peer relations in childhood ADHD. The findings partially support the effectiveness of combining SST with the standard treatment of psychostimulant medication to treat ADHD children with social difficulties and poor peer relations. Specifically, the findings indicated that SST provided improvements over and above those of psychostimulant medication alone in terms of (i) increasing the frequency of initiating social interactions, which was related to an increase in positive communication, as assessed through the behavioural observations and (ii) improving social goal setting, in that the goals were more moral and relationship-enhancing, and less retaliatory.

In addition, there were also improvements in some of the other target variables for the treatment group over the course of the SST program. However, these improvements were not significantly greater than the similar improvements observed in the control group. These included the quality of their social skills in terms of total social skills (parent and teacher-rated), self-control (parent and teacher-rated), responsibility (parent-rated), and assertiveness (teacher-rated); the sociometric status with members exhibiting less peer problems, receiving a greater number of peer nominations as playmates, more positive verbal contact from peers, and exhibiting less solitariness; social communication with more frequent use of positive non-verbal behaviour to respond to peers; in terms of social knowledge, in that social strategies were more effective.

The findings contribute to our understanding and treatment of the social difficulties associated with childhood ADHD. Importantly, for the treatment group, following SST all of the target social variables improved either (i) significantly relative to the control group, (ii) significantly over time, or (iii) in the expected direction even if not significantly. Thus, these findings suggest that the social deficits associated with childhood ADHD are amenable to treatment. While previous attempts at SST for children with ADHD (e.g., Cousins & Weiss, 1993; Pfiffner & McBurnett, 1997; Sheridan et al., 1996) have had more success than other treat-

ment modalities (e.g., cognitive and behavioural therapies; Bloomquist, August, & Ostrander, 1991), the impact of SST found in this study is perhaps more encouraging, given that improvements in several aspects of social functioning were facilitated.

The unexpected improvements found in the control group in some aspects of its social functioning may be attributable to a time lag in the effects of psychostimulant medication. It could be argued that the three-month period that was allowed for the medication to take effect was not sufficient time for it to demonstrate an impact on the participants' social deficits. Psychostimulant medication has a relatively direct and consistent impact on the primary symptoms of inattention, hyperactivity, and impulsivity, but any impact on social functioning is essentially a secondary, non-specific effect, and more or less a consequence of the impact on the primary symptoms. Thus, psychostimulant medication is likely to have a delayed impact on social skills and peer relations. However, this speculation assumes that psychostimulant medication does have some effect on ADHD children's social functioning, which is still relatively undetermined (e.g., Landau & Moore, 1991). Indeed, if this speculation is accurate, it suggests that psychostimulant medication is more effective, albeit slow acting, in addressing the social functioning of children with ADHD than is currently indicated by the research (Landau & Moore, 1991; Pfiffner, Calzada & McBurnett., 2000; Whalen, Henker, Swanson, Granger, Kliewer, & Spencer, 1987).

Another factor that may have confounded the results of this study is participant comorbidity. Although there were no specific diagnoses at the time of the initial assessment, it was suggested during the assessment and, in the case of the treatment group, that some of the participants may have also suffered comorbid oppositional defiant disorder, anxiety, or both. The likely presence of these comorbid conditions in some of the participants may have limited the effectiveness of the SST. In fact, the possible impact of comorbidity on treatment outcome in childhood ADHD has recently been indicated (Multimodal Treatment Study of ADHD [MTA] Cooperative group, 1999). However, it is unrealistic and inappropriate to determine effective treatment for children with ADHD by excluding those with comorbidity, given the remarkably high rates of psychiatric comorbidity in this population (Barkley, 1990; Jensen, Martin, & Cantwell, 1997). Thus, future research investigating effective and efficient treatment of childhood ADHD must necessarily consider the potential effects of comorbid conditions.

In summary, although the improvements in social functioning found in both groups limit conclusions regarding the efficacy of SST in treating ADHD children, they do suggest that their social problems can improve. Further, these findings suggest that contrary to previous research (Johnston, Pelham & Murphy, 1985; Pfiffner, Calzada & McBurnett, 2000), even the longstanding and negative social reputations of children with ADHD may be shifted in a more favorable

direction. However, while the results of this study are encouraging, there are some methodological limitations. For example, three of the measures used in this study utilised Likert scale response formats, specifically a three or five-point 'frequency of behaviour' scale. It can be argued that the three-point Likert response format utilised in the SSRS (Gresham & Elliot, 1990) and the SDQ (Goodman, 1997) may not be sufficient to allow detection of subtle changes in the participants' social skills following the SST program. Alternatively, the five-point Likert scale, which was used in the Goal Assessment Questionnaire (Rose & Asher, 1999), is likely to have provided increased sensitivity to identify the more subtle changes in the participants' social goal setting. It should also be noted that the psychometric properties of some of the measures used in this study are not well established. However, these measures were considered highly relevant and appropriate for this study given that they each represented an assessment tool for the variables of interest.

Another limitation of this study concerns the content of the SST program possibly lacking specificity to the participants' individual and unique social difficulties. This limitation has been identified in previous research (e.g., Sheridan *et al.*, 1996). A more precise way to appropriately address the social deficits with SST may be to carefully assess each participant's social difficulties and then develop a SST program based around these. However, given that each ADHD child experiences various combinations of a diverse range of social problems, the reality of addressing such specific needs in a SST group format is questionable.

Finally, a further limitation of this study was the small sample size and the lack of longer-term follow-up. The small sample size is likely to have decreased the chance of finding more significant changes in the target social variables for the treatment group, if indeed they existed. The constraints of this study meant that post-treatment follow up of participants beyond two weeks was not possible. Thus, the findings of this study cannot be generalised past two-week post treatment. Perhaps longer-term follow-up assessment of participants may have provided different results in that the improvements in social skills may have had longer to firstly develop, and secondly, to generalize to the participants' home and school environments.

CONCLUSION

The social deficits associated with childhood ADHD are complex and persistent, and perpetuate and exacerbate the already poor prognosis of this population. These problems may arguably be the most distressing feature of the disorder for the child. The limitations of the standard treatment of psychostimulant medication in treating these social difficulties and also its negative side effects make it alone, an unsatisfactory intervention for this aspect of the disorder, even though it

may be necessary for the treatment of the primary deficits. SST offers a potentially useful adjunct to psychostimulant medication and limited research has identified SST programs that may be applicable to ADHD. This study found that SST can improve some aspects of the social functioning of children with ADHD who are already on psychostimulant medication. However, because the improvements are limited, the costs and benefits of this approach warrant further investigation. On the one hand, clinicians need to pursue the most effective treatment options; on the other hand, those treating severe ADHD are usually operating within the public mental health system where funding for such investigations is minimal. Despite this, the role of the child mental health clinicians is to improve the personal and interpersonal functioning of children with mental health problems. Thus, the field must continue to explore, investigate, and delineate other combination treatments that will effectively and efficiently impact on the problematic social functioning and poor peer relations of children with ADHD. Further investigations of the effects of combining SST and psychostimulant medication may prove to be rewarding in terms of treating the complete spectrum of difficulties experienced by children with ADHD.

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SPEECH AND LANGUAGE OF CHILDREN WITH ATTENTION DEFICIT AND HYPERACTIVITY DISORDER (ADHD)

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Abstract. *Speech peculiarities of children with ADHD were investigated by the procedures of associative experiment and test for speech control. 170 children were diagnosed by a rating scale for parents and children. Then teachers as experts characterized the children which had attention deficit/hyperactivity disorder. Two samples of children, correspondently group of norm (81 persons) and group with ADHD (24 persons) were compared. 24 children were also diagnosed with ADHD by neuropsychiatrists. More than 60 percent of the children with ADHD had at least once been evaluated by a speech pathologist, but none has received any intervention for their language problems The significant differences in the speech of two samples were revealed. The children with ADHD give more associations which are considered as peripheral (not central) logical reactions, whereas there are not significant differences in grammatical reactions. It proves the importance of semantics and word meaning in the cognitive processes research. The semantic spaces of words of children with ADHD differ from the same words in the group of norm. The 67percent reactions-associations in two samples coincide. Since the words-stimuli are quite common (e.g. army, song, sun), the level of coincidence is rather low, which is evidently connected with peripheral character of reactions in the group with ADHD. There are significant differences in indices of speech anxiety in two samples ($p<0, 05$). The children with ADHD have higher indices in comparison with children of norm group.*

Keywords: *speech activity, attention deficit and hyperactivity disorder, logical central/peripheral associations, grammatical syntagmatic/ paradigmatic associations, psychosemantic space of notion, speech anxiety.*

INTRODUCTION

The problem of children with Attention Deficit/Hyperactivity Disorder (ADHD) is a comparatively new one, as it was diagnosed in the middle of the twentieth century. Oxford dictionary of psychology introduces the ADHD as a mental disorder of childhood affecting between two and ten percent of school-age children worldwide, at least three times as common in boys and girls. ADHD is characterized by persistent inattention, hyperactivity, or impulsivity, with some of these signs and symptoms appearing before age seven, causing problems at school or work and in the home. It also interferes significantly with social, academic, or occupational functioning. The disorder may be manifested as a predominantly inattentive subtype, a predominantly hyperactive-impulsive subtype, or a combined subtype (Colman 2003).

The main determinants of ADHD are considered from both organic and environmental in nature, i.e. from Nature vs. Nurture perspective. Supporters of organic approach such as Aman, C.J. et al. treat ADHD as a genetic factor, connected with brain organization (Aman et al. 1998). They claim it is not a disorder of attention per se, as formerly believed, but a developmental failure in areas of the brain responsible for inhibition and self-control, especially the caudate nucleus, the globus pallidus, the prefrontal cortex, and the vermis of the cerebellum, areas that use dopamine to communicate with one another and that tend to be shrunken in people with the disorder. The supporters of environmental approach (Weiss and Hechtman 1993) explain ADHD from perspective of negative impact of social and physical world. They consider the negative family atmosphere, incorrect methods of upbringing, and harmful environments to be the determinants of ADHD.

The scientific research and psychological argumentations for the ADHD were first conducted in the USA. The main areas, which are problematic for children with ADHD, are represented by Cognitive Skills, Motor/Perception, Emotion/ Socialization/Behavior, Attention, Literacy Skills and Activity Control (Bruce et al. 2006). ADHD, language impairment, dyslexia, and learning disabilities are commonly found to be comorbid conditions. The language impairment is mostly introduced by pragmatic problems of children with ADHD. Rapin and Allen (1983) described the most typical pragmatic problems: rather fluent expressive language, destroyed ability to encode meaning acute to the communicative situation, misunderstanding and low comprehension of connected discourse. Tannock (2002) defined the main pragmatic problems in children with ADHD. There is excessive verbal output in spontaneous speech and decreased verbal output in planned and organized speech, problems in initiating conversations or taking turns. Some researchers highlight the peculiarities of language impairment in different samples of children with ADHD according the core symptoms: inattention, impulsiveness and hyperactivity (Oram et al. 1999; Zasyekina and Zasyekin 2002).

The important fact is that language impairments and pragmatic problems are closely connected with social cognition in general, because children with destroyed pragmatic skills are at risk for social failure (Fijiki and Brinton 2000). Thus, the assessment procedure and intervention of speech of children with ADHD can lead both for speech improvement and social competence development in general.

The only reported data of research conducted in Ukraine was represented by Gadow and Nolan (2002). The sample comprised 600 children between the ages of 10-12 years – immigrants from the Chornobyl nuclear accident, who moved to Kyiv. The researchers found a rate about 18.8 percent of ADHD symptomology in the sample. They explain such high rate by factors of environmental toxins, maternal stress and migration. The results of our research of children between the ages of 8-10 years in Lutsk (administrative center of Volyn oblast', Western Ukraine) show that about 14 percent are at risk for ADHD (Zasyekina and Zasyekin 2008). Sample included 171 schoolchildren, which were diagnosed by a rating scale for parents and children. It proves the urgency of the ADHD problem in Ukraine, and determines the necessity for speech assessments of these children as well as intervention of their language impairments.

METHODOLOGY

The classic of Russian psychologist, L.Vygotsky, claimed that speech expresses the cognitive peculiarities of personality, since the word meaning is the main unit of thinking and speech activity (Vygotsky 1996). From this perspective, we can investigate speech of children with ADHD by means of word-meaning.

Procedure of research contains a number of stages, each of them having its own aim:

- To establish peculiarities of associative word-meaning in two samples correspondently: children with and without ADHD.
- To investigate speech anxiety in two samples correspondently: children with and without ADHD.
- To reveal speech and language competence of children with ADHD and without ADHD of age 8-10 years.

The method of free associative experiment is used for revealing the associative word-meaning, which characterizes speech and language competence (Luria 1975). The method was used in our research for speech and language investigation of children with ADHD. The study group consisted of 105 children (mean age 10 years, 24 children diagnosed with ADHD by neuropsychiatrists, and 81 children without ADHD). More than 60 percent of the children with ADHD had at least once been evaluated by a speech pathologist, but none has received any intervention for their language problems.

During the diagnostic procedure, children from two groups (with and without ADHD) are proposed 20 words-stimuli, which are rather simple for understanding (e.g. *sun, army, song*) and asked to give the first association, which occurs to them. The obtained verbal reactions are analyzed from two points. Firstly, they are defined as logical: central and peripheral (e.g. *sun-rays* or *shines* – central, *sun-winter* – peripheral) and grammatical: syntagmatic (different parts of speech: e.g. *sun-shines*) and paradigmatic (the same parts of speech: *sun-rays*).

The perfect **language competence**, as A. Luria (1975) argues, is characterized by logical central reactions (the rate must not be less than 65 percent). The perfect **speech competence** is characterized by grammatical paradigmatical reactions (the rate must not be less than 70 percent). Secondly, the coincidence of associations is analyzed. The number of similar associations is calculated separately in the sample of children with ADHD and in the sample of children without ADHD. The associations which coincide more than three times are considered as semantic universals (Zasyekina and Zasyekin 2008), which characterize psychosemantic space of the word-stimulus. The usage of associative meaning which is semantic universal of word-stimulus expresses the pragmatic skills of the subject (e.g. semantic universal for word-stimulus *army* is *soldier*). As Deese (1965) claimed, when people use the same associations (their coincidence is semantic universal), they can be easily relevant to acute situation in conversation, and otherwise they demonstrate their low level of pragmatic skills.

The validity and reliability of the method of associative experiment is provided by its cross-cultural potential. For L.Vygotsky (1996), word-meaning is universal construct, which expresses the individual act of generalization and communication, thus reveals the characteristics of personality's speech and thinking. As associative word-meaning can be found in the Ukrainian and English languages the associative experiment is valid for cross-cultural speech investigation.

The speech anxiety was studied by means of the Test "Speech control" (Zasyekina and Zasyekin 2008).

Data analyses were carried out using SPSS. T-tests were used to examine differences between two groups. For revealing semantic universals Factor Analysis (Principal Component Analysis with Varimax Rotation) was used. An alpha level of 0.05 was used for all statistical tests.

RESULTS

The results of investigation of speech activity in samples of Ukrainian children show the significant differences in logical reactions and speech anxiety (see Table 1).

The predominance of peripheral reactions is observed in sample of children with ADHD. The index of logical central reaction is higher in the sample without ADHD. The significant differences in grammatical reactions were not observed. This is in line with Bruce et al. (2006) who state that language impairment is more

commonly found in children with ADHD than severe speech disorder. The higher indices of speech anxiety of children with ADHD comparatively with the children without ADHD show the low level of speech control in ADHD sample.

TABLE 1. INDICES OF LOGICAL/GRAMMATICAL REACTIONS AND SPEECH ANXIETY

F– criteria	Indices of children with ADHD, percent	Indices of children without ADHD, percent
Logical central reaction	18.68	22.23
Logical peripheral reaction	10.00	7.33
Grammatical syntagmatic reactions	19.59	18.74
Grammatical paradigmatical reaction	9.09	10.83
Speech anxiety	9.57	6.86

The results of analysis of semantic universals show the great differences between two samples (see Table 2).

TABLE 2. SEMANTIC UNIVERSALS OF CHILDREN WITH AND WITHOUT ADHD

Word-stimulus	Associations of children without ADHD	Associations of children with ADHD
ARMY	**soldiers** – 40, strength – 6, weapon– 5, war – 4, tank – 3	soldiers – 12
MUSIC	notes – 10, **song(s) – 18**, singing – 7, instrument(s) – 7, dances – 3, melody – 3, sounds – 3	sound(s) – 4
DESEASE	**medicine – 21**, hospital – 6, class – 7, coughing – 6, pain – 4, fear – 3, quinsy -3	medicine – 5
HAND	**fingers – 28**, leg – 8, pen – 4, strength – 4	fingers – 6
FAT	hand – 5, **tender – 16**, soft – 6, cat – 6, thick – 3	tender – 4
WHISTLE	**whistle – 23**, voice -3, scream – 3, sound – 5, noise – 3	whistle – 6

SWEET	tasty – 13, cake – 8, **sweets – 14**, sugar -7, apple – 4, chocolate – 4, bitter – 3	sweets – 5
WINDOW	**glass – 24**, doors – 10, nature – 3, frame – 3	glass – 5
SLEEP	sleep – 17, **bed – 24**, lie – 3, rest – 8 , pillow – 4, night – 3	bed – 3, sleep – 3, night – 3
WEATHER	**rain – 21**, forecaster – 6, sun – 17	sun – 4, rain – 4
TREES	oak – 7, **leaves – 26**, bush – 9, bark – 7, plant – 3, branches – 3	leaves – 4
DANCES	**music – 5**, tango – 4, dancer – 5, movements – 3, dance – 3, waltz – 4, legs – 3	class – 3
DOCTOR	injection – 6, medicine – 10, **hospital – 12** , disease – 7, nurse – 3	hospital – 6
LEG	**hand – 15**, fingers – 14, boots – 5, knee – 5, body – 3, shoes – 4, socks – 3	walk – 3, hand – 3
SOFT	**pillow – 14**, hard – 11, sofa – 7, bed – 3, fur – 3, toy – 4	hard – 5, pillow – 3
SING	**song – 11**, microphone – 6 , music – 8, silence – 3, voice – 5, speak – 3, dance – 5	song(s) – 4
BITTER	sour – 5, **sweet – 13**, onion – 5, untasty – 7, pepper – 8, grapefruit – 5, salt – 3	sweet – 4, lemon – 3, pepper – 3
DOORS	window – 9, **handle – 16**, **tree – 16**　　wood – 7, entrance – 3, flat – 3	tree – 3, window(s) – 3
WALK d	outdoors – 4, yard – 10, walk – 5, run – 5, **street – 13**	street – 4, yard – 3

WIND	**cold – 17**, sun – 5, strong – 3, air -3, storm – 5	strong – 6, cold – 3
FLOWER	violet – 3, **smell – 13,** beautiful – 4, petal – 9, tree – 3, beauty – 6, rose – 3, plant – 3	petal(s) – 3, гарна – 4
HOLIDAY	**anxiety – 11**, New Year – 9, birthday – 6, dance – 3, joy – 6, celebrate – 4, joyful – 3	cake – 3
MEDICINE	**pills – 14**, doctor – 19, disease – 7, bitter – 3, chemist's – 3, hospital – 8	disease – 3
BOOTS	**leg – 19,** lacing – 9, boots – 7, shoes – 6, heel – 3, sport boots – 3	boots – 4, leg – 3
LUSTROUS	**glimmer** – 8, beautiful – 5, gold – 4, ring – 4, varnish – 4, brilliant – 3	gold – 3, beautiful – 3
SCREAM	**voice** – 15, speak – 7, silent – 5, noise – 5, weep – 3, scream – 3, noisy – 3	noisy – 3
SALTY	**salt** – 29, sweet – 7, cucumber – 10, bitter – 9, sea – 3	cucumber – 5, sweet – 3, salt – 4
WALL	hard – 7, brick – 5, door – 7, **drawings – 13**, white – 7, house – 4, window – 3, picture – 3, stone – 3	-
WARK	**run** – 20, legs – 12, stand – 4, movement – 3	run – 6
SUN	light – 9, **warm – 14**, cloud(s) – 9, bright – 6, rays – 4, summer -5, radiance – 3, hot – 3	summer – 5

DISCUSSION OF THE RESULTS

In the sample of children with ADHD there are a few coincidences of associations, while in the group without ADHD there is a lot of similar associations (in the table these associations are bold typed). From our point of view it is connected with

predominance of logical peripheral reactions. Moreover, the same associations of children from two samples are appeared only for 16 word-stimuli – 67 percent of all words. Considering the nature of these words which denote widely used notions (in terminology of L. Vygotsky "life concepts") (Vygotsky 1996) the percentage is rather low (e.g. for word-stimulus "dancing" the main association of children without ADHD – "music" whereas the main association of children with ADHD – "classroom").

At the same time, besides the association "music", there are other coincidences: tango, dancer, movement, whereas association "classroom" is the only coincidence of association of children with ADHD, other word-reactions are quite different. Such variety of associations the sample of children with ADHD show their bad feeling of the context (semantic space of notion), thus low level of pragmatic skills.

The great number of logical peripheral associations of children with ADHD is also connected with higher level of their speech anxiety. The low level of speech control may serve as a serious obstacle for efficient thinking and speech activity, logical central reaction correspondingly.

CONCLUSIONS

The significant differences in language and speech competence of the children with and without ADHD show the necessity of their further deep investigation. The most important question is how the peculiarities of children with ADHD speech influence their social competence in general. Further research of social competence and speech activity of children with ADHD will allow defining speech peculiarities as speech specifics or speech pathology. Moreover, the cross-cultural potential of associative experiment gives good opportunities for a complex cross-cultural research of speech and language of children with ADHD.

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PAPERS OF SYMPOSIUM 3: CLINICAL AND COUNSELING PSYCHOLOGY

EFFECT OF SOCIO-ECONOMIC STATUS ON PARENTING STYLE, LOCUS OF CONTROL AND DEPRESSION LEVEL IN A TURKISH POPULATION

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Abstract. *Locus of control is an important determinant of whether an individual is vulnerable to mood and anxiety disorders like depression. It is known that early childhood experiences related to child-raising style of ones family is directly related to how that person will perceive events in his/her own life in sense of locus of control. On the other hand, socio-economic status of family (S.E.S) is also known to have an effect on the mental health. Individuals from "low-S.E.S" families are more prone to problematic behaviors, anxiety and depressive moods when compared to those from high S.E.S level families. As perceived parenting style is among the most prominent determinants of the mental health status of people during childhood, S.E.S levels may also be among the determinants of the quality of perceived parenting style and mental health status of the individual in turn. This study observes the relation between perceived parenting style, locus of control and depression level in Turkish population from 3 different S.E.S levels (high, middle and low).*

Keywords: Socio-economic status, locus of control, depression

INTRODUCTION

Locus of control is an important determinant of whether an individual is vulnerable to mood and anxiety disorders like depression. It is also known that early childhood experiences related to child-raising style of ones family is directly related to how that person will perceive events in his/her own life in sense of locus of control. On the other hand, socio-economic status of family (S.E.S) is also known to have an effect on the mental health. Individuals from "low-S.E.S" families are more prone to problematic behaviors, anxiety and depressive moods when compared to those from high S.E.S level families. As perceived parenting style is among the most prominent determinants of the mental health status of people during childhood,

S.E.S levels may also be among the determinants of the quality of perceived parenting style and mental health status of the individual in turn. This study observes the relation between perceived parenting style, locus of control and depression level in Turkish population from 3 different S.E.S levels (high, middle and low).

METHODOLOGY

A total of 120 adolescents (15–17 years old, 60 male and 60 female) from families representing 3 different S.E.S levels (n=50) were given the Embu, Children Depression Inventory, Locus of Control Questionnaire. Tests were conducted in schoolsettings of our subjects so as to degrade possible stress-inducing effects of "being tested" in an unfamiliar context.

RESULTS

Results are analysed via SPSS. One-way ANOVA was followed by Tukey HSD as post-hoc to find out possible inter-group differences. Significant differences on 3 subscales of EMBU for each parent (rejection, emotional warmth and protection) and Child Depression Inventory were observed among groups (table 1–2 and figures 1,2,3 and 4). Our Locus of Control results indicate that adolescents from low SES families who prefer external locus of control are more depressive than adolescents from middle and high SES families who prefer internal locus of control at a statistically significant level (Table 3 and Figure 5).

TABLES AND FIGURES

TABLE 1. GROUPS' MEANS AND STANDARTS DEVIATIONS OF MY MEMORIES OF UPBRINGING (EMBU)

	Low SES (n=40)		Middle SES (n=40)		High SES (n=40)		
	M	SD	M	SD	M	SD	F
EMBU MR	13.22	3.75	10.95	4.44	15.12	4.51	11.87**
MEW	12.82	3.45	17.28	4.58	13.58	4.57	15.86**
MOP	16.26	5.65	13.36	4.00	15.94	5.10	5.12 *
FR	17.38	5.06	12.72	3.74	16.28	4.69	14.42**
FEW	12.16	2.98	16.04	4.19	13.88	4.40	12.34**
FOP	15.82	5.12	11.86	3.52	17.04	5.72	15.42**

* p<.05; ** p<.001; *** NS

TABLE 2. GROUPS' MEANS AND STANDARTS DEVIATIONS OF CHILD DEPRESSION INVENTORY (CDI)

		Low SES (n=40)		Middle SES (n=40)		High SES (n=40)		
		M	SD	M	SD	M	SD	F
CDI	MR	21.62	8.60	17.7	6.59	22.02	7..59	4.88*

* p<.05; ** p<.001; *** NS

TABLE 3. GROUPS' MEANS AND STANDARTS DEVIATIONS OF LOCUS OF CONTROL QUESTIONNAIRE (LOC-Q)

	Low SES (n=40)		Middle SES (n=40)		High SES (n=40)		
	M	SD	M	SD	M	SD	F
LOC-Q	10.60	1.22	8.23	1.94	10.80	1..26	25.39*

* p<.05; ** p<.001; *** NS
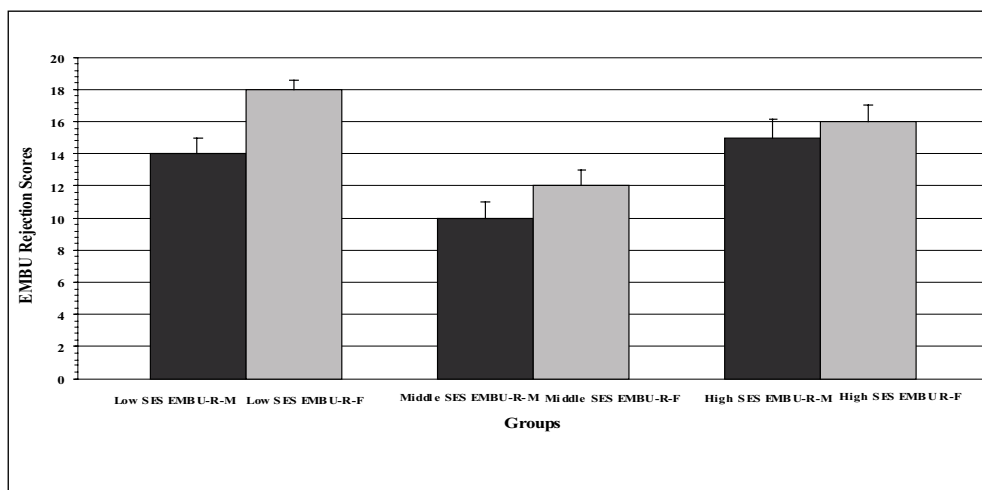
FIGURE 1. INTER AND INTRA-GROUP COMPARISONS FOR EMBU REJECTION SCORES FOR BOTH PARENTS. ERROR BARS SHOW STANDARD ERROR OF THE MEAN.
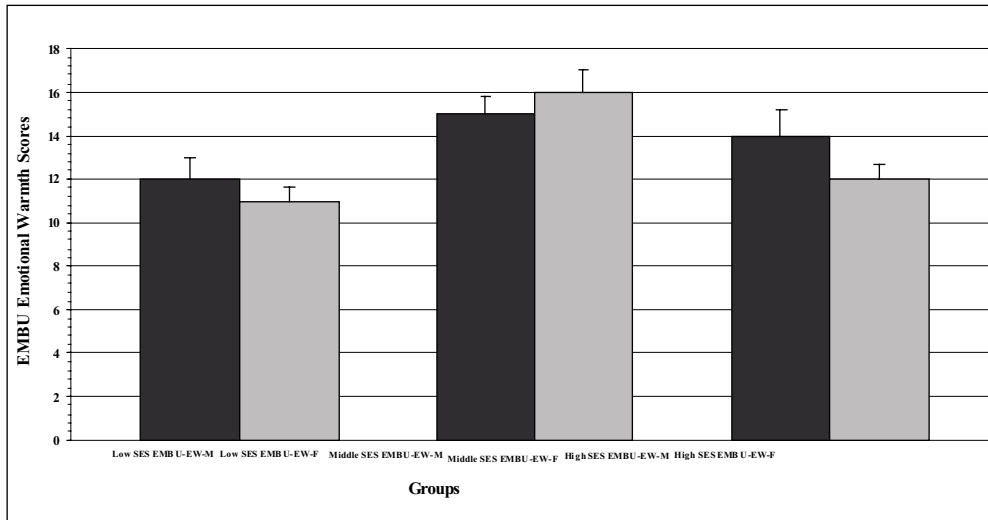
FIGURE 2. INTER AND INTRA-GROUP COMPARISONS FOR EMBU EMOTIONAL WARMTH SCORES FOR BOTH PARENTS. ERROR BARS SHOW STANDARD ERROR OF THE MEAN.
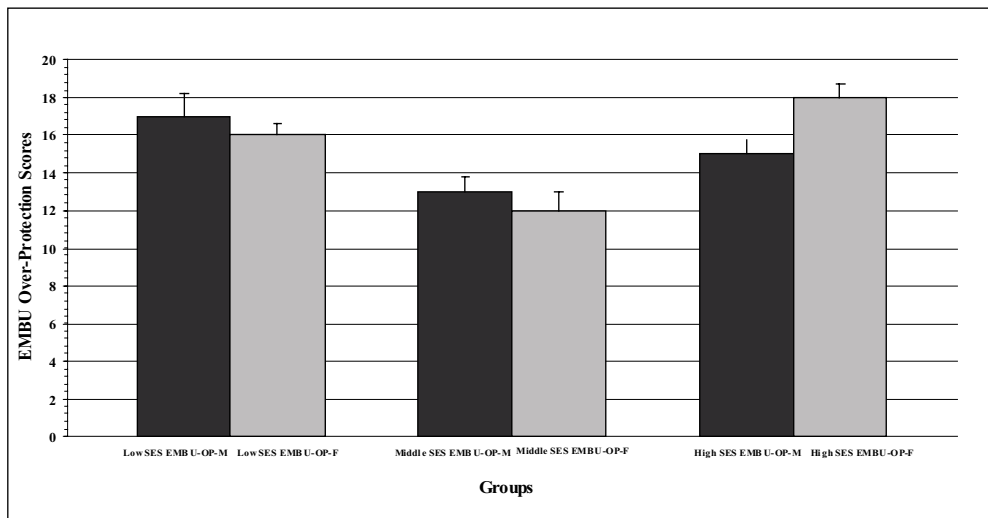
FIGURE 3. INTER AND INTRA-GROUP COMPARISONS FOR EMBU OVER PROTECTION SCORES FOR BOTH PARENTS. ERROR BARS SHOW STANDARD ERROR OF THE MEAN.
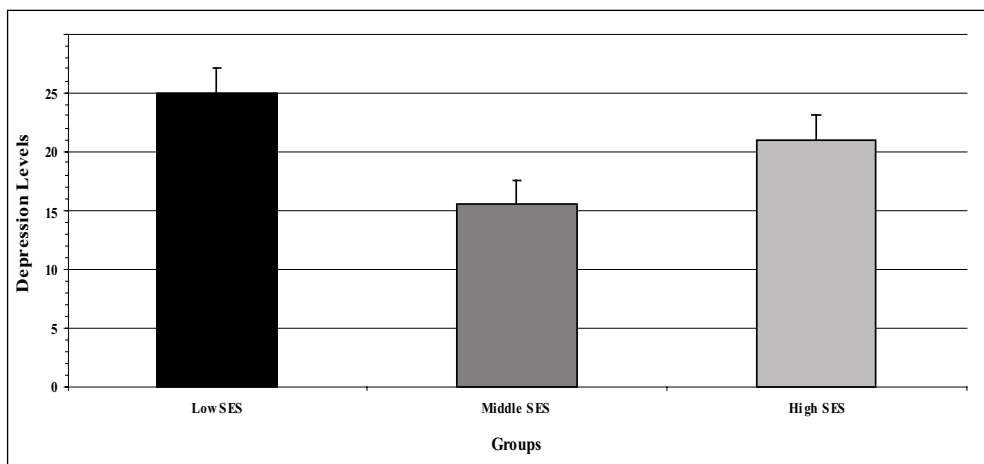
FIGURE 4. INTER AND INTRA-GROUP COMPARISONS FOR CHILD DEPRESSION INVENTORY. ERROR BARS SHOW STANDARD ERROR OF THE MEAN.
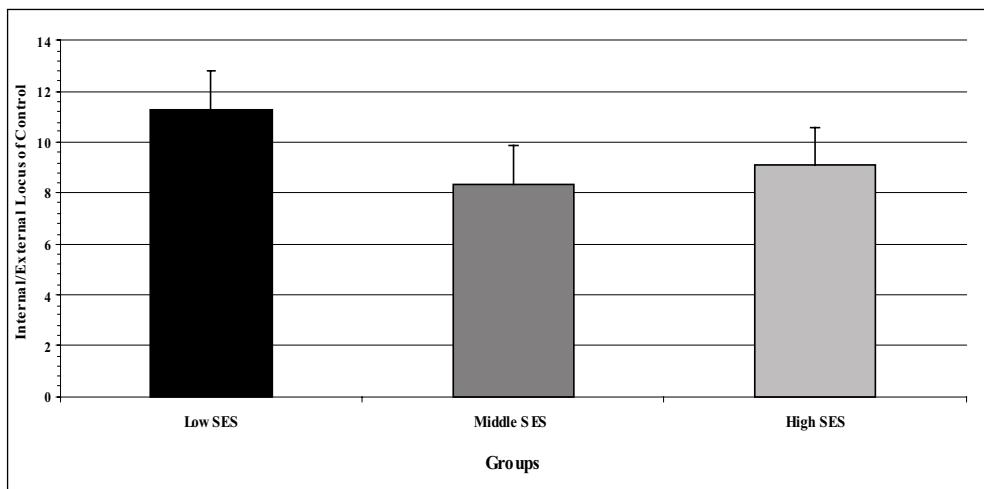
FIGURE 5. INTER AND INTRA-GROUP COMPARISONS FOR LOCUS OF CONTROL QUESTIONNAIRE. ERROR BARS SHOW STANDARD ERROR OF THE MEAN.

DISCUSSION

Our results indicate that socio-economic level of families in turkish population has direct effect on locus of control attributions and, in turn, depression levels

of adolescents. Whereas adolescents from low SES level are more prone to make external locus of control attributions in contrast to adolescents from high SES level who dominantly seem to make internal locus of control attribution, low and high SES families paradoxically seem to have parallel effects on depression levels of their adolescent children as observed in our study. Adolescent from low and high SES level families displayed significantly higher scores than adolescents from middle SES level families on child depression inventory. This observed statistically significant difference seem to rely on different parenting styles adopted by low, middle and high SES families. This high amount of depression might be due to perceived anxious and depressive attitudes in their parents which also shape locus of control attribution styles of their children (Biedela and Tunner,1997).

Our EMBU results are in same direction with our hypothesis; emotional warmth scores are significantly higher for both father and mother evaulations in the middle SES group when compared to low and high SES groups. Whereas, for rejection and over-protection scores situation is just the opposite, which is evaluations of adolescents from low and high SES families of their parents on rejection and over-protection scores in EMBU is again statistically significant than that of adolescents from middle SES families. No statistically significant difference is observed between low and high SES groups on any of these parameters which can be evaulated as low and high SES families have the same perceived parenting style. In fact, perceived parenthood style is known to have profound negative effects on depression level and self-acceptance (Bartch et al, 1995) which is reflected by higher DIC scores of low and high SES groups compared to middle SES group in our study.

It is possible that, although not taken into account as a variable in our study, low SES families in Turkey generally have much more children than the national avarage when compared to middle and high SES level families. This situation might bring about the fact that possible behavioral signs and opportunities of affection within family like time spent with children by their parents is insufficient in low SES families due to over-crowd of the family (Davidson, Jackson and Kalin,2000) which results in higher rejection and lower emotional warmth scores reflected in EMBU. For high SES families source of high rejection and low emotional warmth scores is probably the belief of these families that financial opportunuites supplied to their children by them substitutes for leisure time spared for their children for instance. May be as result of a reaction-formation process due to lack of sufficient amount of overt affection,as indicated by high rejection scores for both mother and father evaluations in EMBU, among parents and their children in low and high SES families, these families tend to behave over-protective against their children when compared to middle SES families.

Another, cultural-based, possible reason underlying our findings is that in Turkish culture it is generaly deemed inappropriate for parents to express their affection in behavioural or verbal sense towards their children like hugging or tell-

ing them "I love you" etc. Instead a widely-accepted way of parenting, in terms of making their children feel secure and "paid attention to", is to behave over-protective. From this point of view over-protection is a plausible way of showing "emotional warmth" for an important portion of Turkish parents in terms of EMBU. However, for middle SES level families, an ideal combination of demographic and economic features can be talked about such as unlike low SES level families Turkish middle SES level families have less than 3 children in average for instance and dissimilar with high SES level families they do not have proper financial sources to substitute lacking "emotional warmth" within family with money, at least per se, which results in an environment ideal for raising depression-free children (Kalff et al, 2001).

CONCLUSIONS

As a general conclusion, the use of emotional warmth as a parenting style does not lead to children with depression anxiety. In terms of SES, for Turkish society, high SES and low SES families have a tendency to more frequently utilize 'over protection' and 'rejection' as a parenting style as opposed to middle SES families who tend to use emotional warmth as a parenting style more often.

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FAMILY ENVIRONMENT OF NARCISSISTIC AND BORDERLINE PERSONALITY DISORDERS

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Abstract. This study aimed to examine the family's attitudes of Narcissistic Personality Disorder (NPD) and Borderline Personality Disorder (BPD). 30 patients diagnosed as NPD, 30 patients diagnosed as BPD and 30 control subjects participated in the study. The basic research assumption was that the group diagnosed as NPD evaluated their mother's attitudes much more negatively and the group diagnosed as BPD evaluated their father's attitudes much more negatively. For this purpose, both of the groups were given My Memories of Upbringing – Short Form (S – EMBU) after had been assessed using SCID-II. According to the results, NPD group were found to evaluate their mother's "over-protective" behavior much more negatively than their father's "over-protective" behavior and this group were found to evaluate their mother and father at an equal level in "rejection". BPD group were found to evaluate both of the parents at an equal level both in "rejection" and in "over-protection".

INTRODUCTION

Narcissism has an important place in psychoanalytic literature. Kohut (1971) evaluated narcissism as a healthy developmental structure; he interpreted pathological narcissism as a developmental arrest in the normal developmental line. Beginning from his initial studies, Kohut explained narcissism in terms of two lines; namely "grandiose self" line and "idealized parental imago" line. These two lines develop in parallel to each other and in the future they constitute the child's purposes, ideals and values. If the parents do not meet the child's needs appropriately in these

phases, traumatic frustrations occur and subsequently result in developmental arrest (Glassman, 1988). If the traumatic frustrations occur in the "idealized parental imago" line, the person oscillates between the source of power they want to be merged and defensive grandiose self in the future. As is known, the fragmentation of integrity is the basic indicator of borderline personality characteristics, because due to the early frustrations, the sufferer could not internalize the parent's soothing features as a little child. If the mother does not mirror the child's phase-appropriate grandiosity, then the traumatic frustrations occurs in the "grandiose self" line, that is to say the child's narcissistic self does not transform and in the future the person oscillates between the unreal valuation of self-esteem and inferiority feelings. The oscillation between these two conditions, where there is an unreal valuation of self-esteem at the surface and intense self-disbelief and inferiority feelings inside, is the basic indicator of the narcissistic personality character. According to Kernberg, narcissism is a faulty development; it is a pathological condition (Gabbard, 2000). Basically, Kernberg examines borderline personality organizations in detail and evaluates narcissistic structures in this group. Kernberg (1975) thinks that the basic deficiency in the borderline and narcissistic structures stems from the mother-child relationship. A cold mother in both of the structures leaves the child hungry. Whereas the borderline structures cannot perceive the mother as complete, the narcissistic structures develop a "grandiose self" as a defense against the mother's way of behaving. A great deal of research attention has been paid to the role of early environment on the development of personality disorders. Personality disorder types, borderline personality disorder and so on have all been studied extensively based on these early environmental factors (Gunderson, Sabo, 1993). EMBU is a self-report measure that retrospectively assesses parents' attitudes towards the subject. This research tried to realize the family environment of the narcissistic and borderline patients basically in terms of psychoanalytical theories; especially Kohut's and Kernberg's theories.

METHOD

Sample

30 patients who were diagnosed as NPD, 30 patients who were diagnosed as BPD and 30 control subjects who did not have any psychological disorders, participated in this study.

Measures

Demographic Information Form was applied by the researcher to obtain the subject's age, sex, education, occupation, marital status, socio – economic status, their psychological pathology history and information about their current medication.

Structured Clinical Interview for DSM (SCID-II) used by the researcher in order to diagnose narcissistic personality disorder and borderline personality disorder. My Memories of Upbringing – Short Form is the most useful test in order to glean adolescents' perceptions about their parent's child rearing behavior.

RESULTS

As shown in Table 1, the mean of the control group is lower than the mean of the NPD and BPD groups in terms of "rejection" and "over-protection" scores of both mother and father and higher than the mean of the NPD and BPD groups in terms of "emotional-warmth" scores of mother and father. Since "emotional-warmth" is the positive behavior, it has been excluded in the comparison of the psychopathology groups.

TABLE 1. GROUPS' MEANS AND STANDARTS DEVIATIONS OF MY MEMORIES OF UPBRINGING (EMBU)

	Narcissistic (n=30)		Borderline (n=30)		Control (n=30)		
	M	SD	M	SD	M	SD	F
EMBU MR	12.23	5.09	13.73	5.57	9.07	1.95	8.41**
MEW	15.77	3.75	14.93	5.84	18.07	3.25	4.04*
MOP	22.83	6.11	22.83	5.73	17.97	4.95	7.50**
FR	13.20	6.13	13.27	5.63	9.13	2.60	6.63*
FEW	14.33	4.68	13.20	5.06	17.00	3.98	5.40*
FOP	2.80	6.82	21.90	5.94	16.17	4.22	8.35*

* p<.05; ** p<.001; *** NS

As shown in Table 2, Paired Sample t-test analysis indicated that the Narcissistic Personality Disorder group's MR scores and FR scores did not differ significantly from each other [t (29)=−1.09, p>.05]. As shown in Table 2, the Narcissistic Personality Disorder group's MOP scores and FOP scores differed significantly from each other [t (29)=2,21, p<. 05]. The Narcissistic Personality Disorder group's FOP scores were higher than the MOP scores.

TABLE 2. THE COMPARISON OF MR – FR AND MOP – FOP SCORES OF NARCISSISTIC PERSONALITY DISORDER GROUP

	M	SD	t	df	sig.
MR	12.23	5.09	1.09	29	.29***
FR	13.20	6.13			
MOP	22.83	6.11	2.21	29	.035*
FOP	20.80	6.82			

* p<.05; ** p<.001; *** NS

As shown in Table 3, the Borderline Personality Disorder group's MR and FR scores did not differ significantly from each other[t (29)=0.44, p>. 05]. As shown in Table 3, the Borderline Personality Disorder group's MOP and FOP scores did not differ significantly from each other [t (29)=1.17, p>. 05].

TABLE 3. THE COMPARISON OF MR – FR AND MOP – FOP SCORES OF BORDERLINE PERSONALITY DISORDER GROUP

	M	SD	t	df	sig.
MR	13.73	5.57	.44	29	.67***
FR	13.27	5.63			
MOP	22.83	5.73	1.17	29	.25***
	FOP	21.90	5.64		

* p<.05; ** p<.001; *** NS

DISCUSSION

We found that there is no significant difference between the MR, FR, MOP and FOP scores in the Narcissistic Personality Disorder group and Borderline Personality Disorder group. This finding is interpreted to mean that the Narcissistic Personality Disorder patients and the Borderline Personality Disorder patients do not perceive much differently from each other of their mother and father as "rejecting" and "over-protecting" them. Narcissistic Personality Disorder group's FOP scores were higher than the MOP scores. This finding is interpreted to mean that Narcissistic Personality Disorder patients perceive the father's over-protective behavior.

In the Borderline Personality Disorder group there was no difference between the MR and the FR scores and between the FOP and the MOP scores. This finding is interpreted in a way that the Borderline Personality Disorder patients perceive the two rearing behaviors negatively in an equal sense for both their mother and their father. In sum, our findings support the view that parental caring and adult psychopathology are related to each other. Taking the findings as a whole, for the Narcissistic Personality Disorder patients and the Borderline Personality Disorder patients, "rejection" and "over-protection" (which are seen as negative rearing behavior) were foreground, but the parents were not perceived differently from each other from this perspective.

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APPROACHING PSYCHOLOGICAL TRAUMA FROM CLINICAL AND HEALTH PSYCHOLOGY PERSPECTIVE

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Abstract. *Definition of psychological trauma, coping styles, intervention of the psychopathologies induced by trauma to which individual is exposed etc. are amongst main topics in clinical psychology. To be defined as trauma a situation must meet these criteria: It must happen suddenly, unexpectedly, unpredictibly and it must be barely controllable by individual . It should also be an extraordinary event resulting in permanent problems and including blaming the others as well. With this point of view besides facts like earth quakes, rape etc. to be diagnosed as cancer, kidney problems,rheumatoid arthrit and being obligated to live with these diseases can be defined as psychologicaltrauma. Due to ever-growing importance of disease-based trauma within the literature of trauma new intersection points between clinical and health psychology are getting obvious. This study aims to evaluate the trauma topic by clinical and health psychology point of views so as to determine ways for psychological support, creating a calm and anxiety-free context in which traumatized individual due to physical health condition can talk about his/her suffer and find power to be self sufficient and fix the problems about self and body integration.*

INTRODUCTION

Whereas psychology as a health profession finds its roots in ancient greek a "health science", academical psychology through its first decades after seperation from philosophy had no obvious intention to build theorotical or applied framework directly related to area of mental health in contemporary terms. Though, psychoanalytic approach was the first solid theory which overtly deemed various neuropsychiatric diseases revealing themselfs with some somatic symptoms could be consequences of "psychological" or "psychodynamic" efficients. With increasing evidence coming from case studies of Sigmund Freud on patients suffering from

hysteria which seems to occur due to subconscious conflicts gave rise to a new area called "Psychosomatic Medicine" (Alan et al, 2002).

Beginning from late 60's and early 70's, in line with profound attempts of psychologists in field of mental healthcare, a new trend called "Behavioral Medicine" began to rise. This brand new approach was founded on two antecedent development; First of all, psychologists in United States were encouraged by national health system to play a major role as "applying scientist" in mental healthcare services. A second reason was that academic psychology during those era was eager to solve mental problems with regard to theoretical framework constructed by behavioral psychologists like Watson, Skinner, Guthrie etc. In terms of behavioral approach psychiatric terms and formulations such as "psychopathology" or "abnormal behavior" should be re-esteemed as "maladaptive behavior" which might well be fixed through new learning experiences (Malone,2001). Thus, "maladaptive behaviors" should be and can be substituted by "adaptive behaviors" via utilisation of either Pavlovian or operant learning principles which is deemed as the core of psychological treatment. In another words dominant scientific paradigm in academic psychology during this era was approaching maladaptive human behavior as any other organism lacking adaptive type of behaviors.

Besides behavior modification technics developed by behavioral psychologists, physiological psychologists indicated that psychological processes have wide modifying effects on physiological processes (blood pressure for instance) such as an individual can control his/her various physiological processes (heartbeat, galvanic skin response and pain sensation) through methods like "bio-feedback" (Alan et al,2002). From this point of view it can be overtly be expressed that in light of contemporary evidences the idea that "subconscious conflicts" have effect on some sort of physical symptoms which is argued by psychoanalytic theory gained a new perspective in the sense that not only our subconscious processes but also conscious learning experiences and sense of having control on our internal and external environment as revealed by bio-feedback applications have determining effects on our health condition (Malone, 2001).

PSYCHOLOGICAL TRAUMA AND CHRONIC ILLNESSES

Psychological trauma literature focuses on definition of traumatic event, traumatic memory, positive and negative effects of traumatic events on victim (McNally 2003).Defining an event as a trauma needs some items. These are; event must be sudden and unexpected, event must be sudden and unexpected, uncontrably, not regular,event's degree of creating chronic problems, presence of accusation (Tedeschi and Calhoun 1995 pp. 16–19). From these definitions, taking diagnosis of chronic illness (cancer, renal disease, rheumatoid arthrit, e.tc.) and surviving with these illness is a psychological trauma.

Illnesses are classified as either acute or chronic. An acute illness lasts for a short period of time and may go away without any intervention, the assistance of medications and/or surgery. Chronic illness is classified as an illness that recurs or persists for a long period of time and may last for a person's entire life.

There are four types of chronic illnesses (Sperry, 2006):
⸽ Life-threatening diseases such as fast growing cancers, stroke or heart attacks;
⸽ Manageable diseases like diabetes, hypertension, osteoarthritis, chronic sinusitis;
⸽ Progressively disabling diseases like Parkinson's, lupus and multiple sclerosis;
⸽ Those not life-threatening but with waxing and waning course like fibromyalgia and chronic fatigue syndrome.

Other important distinctions between acute and chronic illness include (Cummings et. al., 2005):
⸽ Acute illness onset is abrupt and chronic illness is gradual;
⸽ Acute illness is time limited and chronic illness is indefinite;
⸽ Acute illness tends to have a single cause and the causes of chronic illness are multiple and changing;
⸽ Acute illness prognosis is accurate and the prognosis in chronic illness is uncertain;
⸽ Technology is effective in acute illness and indecisive in chronic illness;
⸽ There is a cure for acute illness but rarely a cure for chronic illness;
⸽ Uncertainty is pervasive in chronic illness;
⸽ Professionals have the important knowledge in acute illness and both the patient and professionals have complementary knowledge in chronic illness.

PSYCHOLOGICAL COMPLICATIONS OF CHRONIC ILLNESS AND INTERVENTION PROCESS

Chronic illness further complicates normal development. The chronic disorder, treatment requirements, hospitalization, and surgery (when necessary) all intensify concerns about physical appearance, interfere with the process of gaining independence, and disrupt changing relationships with familiy and social evnironment. Since cures are rare in chronic disease the best outcome we can expect is adjusting to the illness and disability. The aim of the psychological intervention of these chronic illnesses is to improve the quality of life of the patient and to support his/her well-being and his/her family.

When an chronic and also life threatening illness is occured, usually patient pass through four phases; namely, crisis, stabilization, resolution and integration. According to Fennel (2003) and Sharoff (2004) by intervantion patients may move through the phases at different rates and that patients may return to an earlier phase. In fact without intervention a patient may return often to the crisis phase.

Psychological understanding of the patient should be empatic, supportive and instructive. Accoding to researches, psychological treatment decreses the intensity and complication of the symptoms, negative feelings (pain, depression, feeling lost, loss of control, mourning ect.) during the treatment process and increases sense of trust, quality of life and adaptation to the process.

As a psychologist we should be careful about the interaction among these three factors; physical pathology, intrapsychic life and psychosocial environment. Also we should evaluate these factors in order to intervene the problem;

- The ilness, the organ/organs that are influenced, whether there is an organ loss or not, the patients reactions and evaluations about this loss;
- Personality structure, developmental factors, unconscious conflict;
- Cultural thoughts about the reasons of the illness;
- Other experiences about the illness;
- Attitudes bout being patient;
- The patient – doctor relationship;

Four kinds of psychotheraupetic approaches can be mentioned that can be effective in chronic illnesses:

- *Short – Term Dynamic Therapy:* Patient's current problems are dealt with various biological, familial, social and other dimensions. Therapist pay attention to the unconscious thoughts about being ill and specific illness and do therapeutic intervention by considering here – past interaction.

- *Behavioral Therapy:* This kind of treatment is effective to learn and change the negative learning and attitude that may cause the illness. Also this intervention can be effective to adjust the patient in his/her new situation.

- *Cognitive Therapy:* This technic is also based on learning theory. It undertakes the person's thought processes and cognitions which are effective on his/her behaviours and emotions. The aim of this approach is to notice the cognitive errors by the patients and rearrange them.

- *Group Therapy:* It aimed to bring the patients who have the same problems; so that they can share their experiences about the illness and the way they cope with (Ozkan, 1993).

CONCLUSIONS

Considering chronic illnesses as a source of psychological trauma leads us to a more efficient formulation for helping patients suffering various chronic illnesses in coping better with their health problems in a more holistic manner. From this point of view, perceiving and experiencing a chronic ilness as a traumatic event acts like an obstacle which detains patients from focusing on their medical tratment procedure in both physical and psychological sense that might well result in decreased success ratio of any given treatment. However, by being aware of the trauma experience of the patients this process of decay in success probability of any medical treatment can be reversed by utilising proper psychological intervention technics. Thus, when dealing with health issues the concept of "biopsychosocial approach" should always be on mind.

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A TERROR BEHIND THE MORTALITY SALIENCE: THE ANXIETY OF LIFE'S MEANINGLESSNESS

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Abstract. *The present research is placed within the general framework of terror management theory (Greenberg, Pyszczynski & Solomon, 1986), exploring deeper the mechanisms of mortality salience effects. The purpose of the study was to find out whether the experimentally induced life's meaninglessness triggers cultural worldview protection tendencies similar with ones encountered when the mortality ideation is made salient. Subjects (N=180), students either at a philosophy college or at a polytechnic one, participated in an experimental study in which the existential anxiety has been induced differently: one group received for reading a text which aroused thoughts of personal death while the other had a text arising thoughts of the existence's meaninglessness. Also, for each of two majors, a control group existed. The activation and presence of cultural worldview defense was assessed through three of its basic components – morality support, endorsement of socio-political stability and intergroup discrimination – compared to control base-lines (Rosenblatt, Greenberg, Solomon, Pyszczynski, & Lyon, D., 1989). The results sustained the hypotheses. It was confirmed that experimentally induced meaninglessness or absurd produced the same cultural worldview defense effects as those in mortality salience condition. More than this, as expected, in absurd conditions the defense showed a tendency of growth, especially for philosophy students.*

Keywords: *existential anxiety, terror management, salience of life's meaninglessness, cultural worldview defense.*

INTRODUCTION

**"If we were able to live forever, we would still be concerned
about the meaning of life"**
(Existential psychotherapy, Yalom, 1980, p. 253)

The present research is placed within the experimental social psychology domain, at the convergence point between philosophy and psychology investigating the existential anxiety and its effects on individuals and theirs social lives.

The existential anxiety arises questions on fundamental concerns like death, meaning, freedom, choice and responsibility, concerns which defines us as a human being and which activates powerful feelings and emotions when an individual contemplates on them. People are meaning creators, they have a "need for meaning" (Heine, Proulx, & Vohs, 2006), and this need is the catalyst which leads them to try to maintain a stable, coherent worldview. If that worldview is threatened by inconsistent information, people are assumed to feel a tension and discomfort and to be motivated to restore consistency.

Many studies showed that in general, people tend to like similar, socially desirable others and dislike those who are deviant or express dissimilar attitudes. Still, it remains the question about the circumstances under which this effect is most likely to occur and the kind of people that is most likely to affect. The terror management theory (Greenberg, Pyszczynski, & Solomon, 1986) studied these motivational factors and came with an explanation: when people are led to think about death they later exhibit more polarized judgments of in-group and out-group members. This reaction has been interpreted as an attempt to defend against existential anxiety by seeing oneself as a secure member of a meaning-convey cultural group. The human being rationalizes: because our inability of grasping the meaning of life, we learn to make sense of the world through language, culture and social interaction. When we feel unsure about how to interpret some stimulus, we try to establish consensus on the nature of reality by turning to others for guidance and social comparison. And, by definition, this interpretation implies relativity, subjectivity. Following the idea of William James (1909) who said that there is not one essential truth, just existential truths we enter the field of doubt: the truth of a person it is as valid as the truth of anybody else. This creates a state of incertitude; we become anxious and when an individual transgresses social norms, or belongs to an out-group with a different perspective, or he or she just has an opinion that comes in contradiction with our own, our confidence that our consensual worldview is correct is threatened, and so we react negatively to them (Schachter, 1951).

All this mental kneading, feeding itself from our uniquely human cognitive capabilities, like the capacity for self-awareness and the ability to think

about the future, offers the premises for contemplating our inevitable death. This contemplation awakens the terror which is our emotional response of the instinct for self preservation. To cope with this terror, which can be debilitating to experience on an ongoing basis, we seek to establish a anxiety buffer which protects ourselves by creating a consensual social reality, a cultural worldview which provides the promise of immortality – either symbolically, by allowing one to transcend death through something significant that they have done, contributing, in this way, to a culture that continues into the future, or literally as in case of religion. So, if these mechanisms enter in motion and they are well adapted, the individual will be to some extent buffered from death anxiety.

Moreover, aside the terror that death arouses, it brings along itself the seeds of doubt and uncertainty about the meaning of life. In his book "Being and nothingness" (1943), Jean-Paul Sartre said that the reason for which death has such impact on the psychological balance of the individual is because it carries within a deeper issue: life's meaninglessness: "All human beings are born without a reason, live in helplessness and die by accident. It is a nonsense that we are born, as is nonsense that we die" (p. 436).

Many writers see anxiety about death as just one (albeit an important one) of several other basic existential concerns. Most existential writers emphasize the issue of meaning, freedom, isolation in a world without apparent absolutes. These writers shape the climate of the absurd which is defined through a world in which the absolute knowledge slips through our fingers, a world which leaves us prey to the relentless passage of time and provide with only one certitude: our inevitable death. So, the question that arises is: Why do we bother … why do we keep on going on when, at the end, all will be ashes and dust? F. M. Dostoievski (1880) once said that the mystery of human existence is not in living, but in knowing what you live for. Without a precise notion of his purpose on this world, man would never accept to live.

Even Becker, in 1973, delineates two major forms of existential anxiety: the fear of death (where death appears as basic anxiety) opposed to the fear of life (where the meaninglessness is emphasized). These two fears give birth to the absurd which arises, as Albert Camus put it, in 1942, from the "confrontation of the infinite human desire for clarity and the irrational silence of the world" (p. 375). So, the perpetual self creation and meaning creation is the active response of man to the existential anxiety.

In conclusion, this research tries to stress the fact that the absurd is, in fact, the factor which lies at the bottom of death terror and, although, the annihilation anxiety is a central concern, it has tentacles that links it to the absurd which was little taken into account and not properly investigated. As Lev Tolstoy reflected in 1882: "Is there any meaning in my life that the inevitable death awaiting me does

not destroy?" (p. 84); the two aspects are intertwined, and in many occasions it is hard if not impossible to distinguish between them.

The present study had three experimental conditions designed to prime either the mortality salience or life's meaninglessness and, of course, the control group. The participants were split into groups targeting each of the experimental conditions and they were given to read passages arousing thoughts of death or existence's absurdity. In the control group, participants did not read any written passage. Then, all the participants had a distraction task representing the necessary delay for the previous texts to take effect. After that, all participants read descriptions of stimulus persons who might be perceived as either upholding or threatening the cultural worldview. The dependent measures assessed the polarization of their judgments through a total score at an interpersonal attraction Likert scale.

While doing our research we were looking for empiric confirmation for two specific predictions:

⟦⟧ **Hypothesis 1:** Exposing an individual to the life's meaninglessness (absurd salience condition), he or she will exhibit vehement reactions for defending his cultural worldview. These reactions will be similar, or even greater, than those produced by the mortality salience.

⟦⟧ **Hypothesis 2:** The worldview defense in the absurd salience condition will be emphasized and bold, especially, for the philosophy students, compared with those from polytechnic. We expect this due to their heightened sensibility toward ultimate life's concerns and contemplation.

METHOD

Participants

Students (N=180): 90 from the Faculty of Philosophy and Socio-Political Sciences "University Alexandru Ioan Cuza", Iaşi; 90 from „Gheorghe Asachi" Technical University of Iasi – participated voluntarily in the study. Their ages ranged from 21 to 26 (M= 22.3).

Design

The design of the study was 3 x 2 factorial in which the three levels of existential anxiety (absurd salience, mortality salience and control group) was crossed with the two levels from specialization type (philosophy or polytechnic students).

Procedure

Participants were told the experiment involved forming first impressions then they received the packet of materials individually and were allowed to work in their own pace. All instructions were included in the packet so there were no further contact between participant and experimenter until the completion of the study. At that time they were debriefed individually, and the study was explained fully to them.

Instruments

The first component of the packet of materials was the texts inducing the experimental manipulation. Participants either received one of the salience manipulations or, if they were in the control group condition, simply proceeded to the next set of materials. There were two salience manipulations, each consisting of a paragraph supposedly written by another student. The paragraph was accompanied by the following instructions:

The paragraph bellow was written by another student to describe a certain thought, issue or life experience.

Read the paragraph and carefully consider the ideas expressed.

After you have read the paragraph once, look it over again to identify a few ideas that caught your attention. In the space provided below, write down the thoughts or ideas that impressed you the most.

In the mortality salience condition, the paragraph depicted death as a systematic, orderly process that is a natural part of life (e.g., "All mortal beings must one day face the reality of their own death.[…] We are beings with limited life spans who go through a cycle of life and death. […] Individual death is an event which is a definite part of a larger cycle. Mortal beings live then die, this fact is clear").

In the absurd salience condition the paragraph was based on ideas from the work of existentially oriented writers like Camus, Sartre, Fromm, Tillich, Yalom, that stressed the ambiguity and meaninglessness of life (e.g., " I don' t know what it means to live this life. […] Each day the world is different and I just get confused and lost in all this change. […] I' m like a speck of sand but even the whole beach does not come close to showing how small I am in this universe. I try to find some sense and meaning in reality to answer why I'm here but I just come up blank").

The next element in the questionnaire was Watson, Clark and Tellegen's (1988) PANAS – Positive Affect and Negative Affect Scale – which asks to indicate on a 5-point scale their mood across 10 positive affect items (e.g., happy, enthusiastic) and 10 negative affect items (e.g., distressed, upset). This was a distraction task, so the results were not taken into consideration at the final analyses.

Participant then were asked to read some short descriptions of different people and to give their first impression of them. The next several pages con-

sisted of a series of short characterizations, each followed by a 7-item interpersonal judgment scale. The original scale belonging to Byrne (1971) which had six items, could not be found, so the scale we used was built on other dimensions (the person's apparent intelligence, morality, cooperation, likability and social adaptation) each rated on a 7-point scale from 1– below average to 7– above average).

Four target persons were described: two of them positive and two negative. These four texts embodied the adhesion to the cultural worldview and were built on three domains: morality support, endorsement of socio-political stability, intergroup discrimination. The three domains were selected by adapting the reasoning of previous research to the context and concerns of our particular student sample. In the first domain the target person was a social hero who helped catching a criminal with the risk of loosing his life. In the second domain the target person was a supporter of the communist ideology who wants to get in power to restore it. And finally, in the third domain were two persons, one belonging to the in-group (the person which was described attending courses at the same university as the subject) and the other one to the out-group (the person which was described was a student at a rival college). All four characterizations were randomly ordered.

RESULTS

All four texts, along with the interpersonal judgment scale were pretested on a number of forty people to determine whether the chosen dimensions are representative. Thus, for each text it was done the reliability analysis by calculating the alpha-cronbach coefficient for each scale. Following this analysis, all coefficients have exceeded the significance point of 0.7 which means that the required fidelity was assured.

For each participant, a liking score was computed for each target person by summing the five affirmations from the interpersonal judgment scale. Also, a total score was made by summing the results obtained by each participant at the four texts that they received for evaluation.

Hypothesis 1
We predicted that exposing an individual to the life's meaninglessness (absurd salience condition), he or she will exhibit vehement reactions for defending his or her cultural worldview. We expected these reactions to be similar, or even greater, than those produced by the mortality salience.

Given the non-normally distributed data non parametric tests were used. So the scores were analyzed with Kruskal-Wallis test, the non-parametric counterpart for One-Way independent ANOVA.

TABLE 1. RANKS FOR KRUSKAL– WALLIS TEST

		Mean Rank
Existential anxiety	Absurd salience	108.64
	Mortality salience	93.88
	Control group	68.98

As it can be seen from table 1, the existential anxiety had a significant effect on the individuals: $H(2) = 17.77$, $p < .001$. Mann–Whitney tests were used to follow up this finding. A Bonferonni correction was applied and so all effects are reported at a .0167 level of significance.

It appears to be a significant difference between all the three conditions taken pair wise: mortality salience condition ($M_{mortality} = 72.13$) and the control group ($M_{control} = 48.87$): $U = 1102$, $r = -.0473$; $p < .001$; absurd salience ($M_{absurd} = 70.39$) and the control group ($M_{control} = 50.61$): $U = 1206.500$, $r = -.40$; $p = .002$; mortality salience ($M_{mortality} = 52.25$) and absurd salience ($M_{absurd} = 68.75$): $U = 1305$, $r = -.33$; $p = .008$.

The results confirmed our general hypothesis: in the absurd salience condition the mean rank is the highest which means that in this condition the effects for defending the cultural worldview were the strongest (as can be visualized in Graphic 1 found below).

Existential anxiety
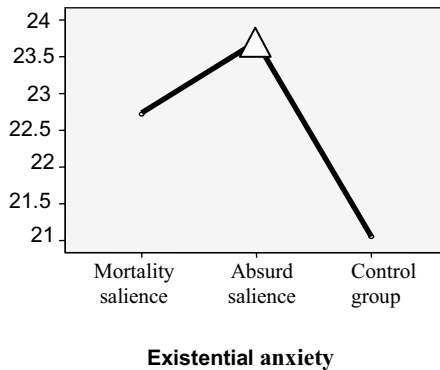
GRAPHIC 1: MEAN SCORES OF WORLDVIEW DEFENSE

Hypothesis 2

We expected that absurd salience, will be emphasized, especially, for the philosophy students, compared with those from polytechnic.

After a split of the database we run again Kruskal–Wallis tests for each students' specialization type (see Table 2).

TABLE 2. RANKS FOR KRUSKAL-WALLIS TEST

		Mean Rank	
		Philosophy	Polytechnic
Existential anxiety	Absurd salience	54.97	54.57
	Mortality salience	46.30	47.55
	Control group	35.23	34.38

For each specialization, either philosophy (H (2) = 8.604; p = .012) or polytechnic (H(2) = 9.236; p = .001) it can be observed a growth of scores from one experimental condition to another, culminating in the absurd salience condition. We could say that our first hypothesis is supported regardless of students' majors.

We used again Mann-Whitney test while comparing philosophy and polytechnic students' defense scores only in the absurd salience condition. Our second hypothesis is only partially confirmed (U = 326. 500, r = − .23, p = .06). The results showed only a statistically significant tendency for the philosophy students ($M_{philosophy}$ = 34.62) being more defensive comparing to polytechnic ones($M_{polytechnic}$ = 26.38); (see Graphic 2).

Existential anxiety
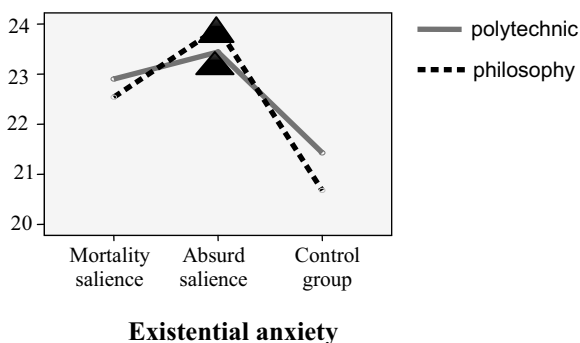
GRAPHIC 2. MEAN SCORES OF WORLDVIEW DEFENSE

DISCUSSIONS

Following statistical analysis applied, the results showed that not only death anxiety triggers the worldview's defense mechanisms but the absurd salience produces similar effects, even greater ones. If in case of mortality salience, the results meet the hundreds of studies conducted until now, for the absurd salience these results are encouraging. The existence's absurdity is an issue in its early state which waits to be investigated in a more systematic manner. A possible explanation of these results it is brought by the Meaning Maintenance Model (MMM; Heine & Proulx,

2006): the death threat is only one of the events which weakens the psychological balance of an individual in his search for coherence. But it's only a piece of a larger, integrator concept: the life's meaninglessness.

Perception of the absurd comes from the relativity of the standards found around us. This relativity and the feeling of being insignificant in a vast universe brings the human being to the point where everything is questionable and nothing seems secure and clear. And doubt is the first step in welcoming the absurd. When our internal world is shaken it becomes hard to distinguish clarity in the external world. The interference of the two worlds leads to the loss of meaning and an equivalence of all things and actions. This given the situation, a possible way out is offered by another person, similar to us, who reassures us about the correctness of our beliefs and restore our internal stability.

The view of the world and the world itself are two different things. Between the two may occur a discrepancy which is reduced if the individual finds his conception in the way of thinking of another individual. We are without a doubt social beings and we need others to confirm or re– adjust our beliefs. Any purpose achieves greater consistency when it is in line with similar others.   The terror management paradigm, used in the study, showed significant results for both mortality salience and absurd salience. The issue of mortality it is, undoubtedly an important one, but thinking about our own annihilation rises, in fact, attention to the strangeness of death and the fact that death is a mysterious, absurd phenomenon.

As for the second hypotheses, that philosophy students will exhibit more vehement reactions for defending their cultural worldview, although the critical value of .05 was not reached, trend showed that there are conditions under which the absurd arises and the kind of people that are more likely to experience it. A possible explanation is that the life's meaninglessness is a more abstract, ambiguous concept that requires a certain spirit orientation and a certain propensity for being acknowledged and felt.

Death is certain, maybe the only certitude that we have along our lives. It is a universal law that affects us all. On the other hand, the existence's absurdity requires a more particular life style, one that is characterized through a detailed analysis of the aspects of life, an eye to uncover even the slightest inconsistency and mental resources in the attempt of understanding the differences found around us. The social and cognitive psychology provides us with a framework for understanding the relative perception: we observe only what we believe and we tend to complete the missing details so that they will confirm our mental schemes, ignoring details that exists but are not part of our initial mental representation or adding things that do not exists but match that representations.

Future studies in this area could examine deeper the issue of the life's meaninglessness as well as other types of responses people have to this matter, beside

embedding in a cultural worldview which helps us cope with the existential terrors of our existence or seeking distraction by focusing on the details of day-to-day existence which makes us less sensitive to absurdity an world's incoherence.

When the noisy world withdraws, giving us a mental tranquility, then the absurd anxiety arises. It is a destructive force that leaves deep scars on the conscience of the brave one who dared contemplate it. And concrete solutions to questions raised there are none. In this case we are left only with subterfuge: we seek a meaning for our life so that we could keep on going on.

There will always be mysteries that cannot be revealed, but even all this wandering in the dark that existence throws us in means action, offensive. Through struggle people assert themselves as superior beings aware of their abilities and that do not collapse when obstacles appear: people can be defeated but never kneel down. Their self-preservation instinct will always be a strong catalyst and motivational factor.

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CONTRIBUTION OF REFERENTIAL ACTIVITY THEORY AS EXPLANATION MODEL ABOUT FUNCTIONING OF PERSONALITY IN STATE OF PSYCHOTIC MENTAL DISORDER

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Abstract*: The multiple Code Theory is an innovational psychological theory of emotional intelligence and emotional information processing. The theory concerns the interactions among diverse sensory, motor, somatic, cognitive and linguistic representations and processes, their integration in the organization of the Self and their adaptive and maladaptive functioning in relation to the individual's goals. This theory presents a new level of challenge in psychological science looking for crossing point between modern results of cognitive and experimental methods in psychology, including studies of computer simulation of intelligent processes and the psychoanalytical concept of mind with observations of infant and child development and emotional theory. Multiple code theory provides new psychological explanation about psychotic functioning of personality, combining cognitive constructions and psychoanalytic way of thinking.*

Keywords*: Referential activity, Psychotic functioning, emotional schemata*

Mental health and mental illness concepts are the subject of many scientific disciplines. In these areas, whose boundaries are highly disputed and not always clearly defined, multiple studies have been developed.

The discussion about the nature of the the soul, respectively mental activity characterized the entire history of human civilization. Especially in the field of psychological science and practice one of the best – the essential questions remain on how the most effective and reasonable to seek relief of mental suffering. Different schools and paradigms in psychological science continued efforts invested in creating a stable concept, summarizing trials to be treated appropriately and apply emotional support in cases of mental distress and disorder.

Psychotic personality development often attributed automatically in medical terms as a medical condition. In psychological term, however the so-called psychotic mode of functioning is seen as a serious personality dysfunction and psychological obstacle to fulfilling lives. This psychological profile makes it impossible to compensate for the existing good personality deficits.

For the purposes of this study, the term psychosis we'll understand those aspects of mental functioning similar or identical to the picture of schizophrenic disease, which does not allow personal development and successful social adaptation.

Psychosis in nature shows as a state and in parallel, as a process leads to a qualitative change of personality in which the deformation occurred in the reporting of subjective and objective reality.

Psychodynamic of psychotic, respectively schizophrenic process seems most comprehensive, readable and thoroughly investigated in theories of broad psychoanalytic – psychodynamic direction.

Psychodynamic psychology, also known as metapsychology having more than one hundred years of history and development, today represents – an orderly and comprehensive conception of mental functioning of the individual.

On the other hand in modern science is well-known controversy in the explanatory models for the development of psychology between cognitive psychology and metapsychology. On the other hand it is important to emphasize that the discussion between these conflicting and even at times mutually repudiate explanatory models, progress has been intensified in the last twenty years. In this process we are witnessing a significant upgrade of psychological research and construction of new explanatory models that reformulating theories of information processing in humans and the concept of investment of mental energy described from Sigmund Freud. Some of the results of these efforts are the creation of the theory of emotional intelligence, and enriched by the contributions of Peter Fonagi concept of attachment. In this field of research for multiple code theory is an innovative psychological concept, performing as part of the ambition to create an intersection in psychological explanatory systems between cognitive science and psychoanalysis. Multiple code model has been developed by Professor Wilma Buchi in 80 years to 20. century in the United States, based on two-component code for Paivio processing of cognitive processes and challenge psihodinamichnata explanatory system of personality functioning.

Historically the concept in question issues are very important point in the concept of mental representations, understanding, giving a basis for qualitative understanding of human mental activity. In this perspective, in 1971. Paivio presented his model for information processing and organization of memory, which identifies two separate systems for perception and information storage with separate rules for the conduct of the process for each system. After the initial analysis

of sensory perception and believe that the information can be stored or in verbal or perceptual information source or both simultaneously. The main ambition of this model is linked with efforts to detect and identify the principles that govern the structure and properties of each of the two systems and to be seen how they are interconnected. This concept, proposed after the inclusion of pa W. Buchi and emotional functioning of the system became known as a systematic concept of multiple codes at the two-component model, proceeding from the notion that "... the organization of the processes of emotional information involves itself in many components. "[5, 173]. Theory code becomes more popular as a concept and the reference activity, a special interest in the dynamics of personality in emotional processes, relying on the basic constructs of pre-symbolic and symbolic system for processing information. The two schemes, together with the terms of reference activity, emotional and affective core scheme constructed framework of theory code.

Pre-symbolic processing systems of information, which are built by connectionist approach or approaches for parallel delivery of information act as continuing without outlining dimensions of discrete elements or specific subject of measurement units. As the Buchi Pre-symbolic system is massively parallel, multi-synchronous operation and can be characterized as much more content than described in terms ... "[5, 174]. It is important to emphasize that pre-symbolic processing of information in various ways and means is evident in all sensory modalities and is particularly dominant in the sense of smell and taste. This primary cognitive information also includes the important components of information operations in visceral kinetic systems and is presented on the first level of integration of information in a private code. Information from this data source that described the level of the organization are not yet ready and prone to discussion and sharing. Pre-processing of symbolic information contained in itself infinitely subtle variations and at the same time can not be delivered by standard measuring procedures and computer systems. An example is the way we as active, living people can recognize changes in the emotional state of others, based on the perception of subtle changes in their facial expression or posture and of course we are able to recognize changes in our own emotional state, thanks to information from our somatic or kinetic experience. But the fact is that although we may use that information, it is virtually impossible to specify the basis on which to perform our evaluations. Operating without a clearly expressed intention and direction, pre-processes and symbolic representations may be taking place experiences as "beyond us" outside the main area of the personality, the one area on which we have the feeling that the exercise volitional control. Experienced as a kind of "external agent" pre-symbolic processing can be seen as acting in some cases beneficial – but in other cases with a malicious manner. It is also important to add that according to the explanatory system of Buchi our internal creative process becomes active due to this level of

mental and cognitive processes. Also, too often we begin to feel as objects of our emotional and physiological impulses feel unable to manage them intentionally. Developing this point of view of psychological testing also get a new value a psychological explanation for the use of alcohol and psychoactive substances. In the search for balance in the level of emotional and physiological effects, people often invite called. "Foreign agents" – alcohol, coffee, tranquilizers, sleeping pills, antidepressants and drugs – the regulation of the functions.

In multiple code theory emotional experiences and relationships are defined as "memory schemes established through repetition of relation links with other important people at the beginning of life ..." [5, 183]. Emotional circuits are established as prototype images of the personality of the individual in relationship to other people, established through the repetition of similar emotional states [5, 183]. Such conditions in turn represent the conurbation of sensory, visceral, and motor elements in high pre-symbolic in nature and outside the scope of conscious mental life. For this reason they can not be directly verbalized, but it is possible to describe them as a prototype illustrating events in which these elements were active. Following this procedure already own the instrument through which we can give valuable psychological explanation of the emotional circuits, respectively. their dysfunctions and difficulties that looks innovative and creative approach to the understanding of psychotic states of the individual. Under these sites have special schemes to the people who are active and intense relationships and targeted by our actions and reactions. These interactions are presented in non-verbal symbolic code, while the somatic components of the scheme are presenting in various forms in the pre-character code.

Relatively limited number of scientific works are not currently known, trying to explain the processes in a psychotic state through the prism of multiple code theory. A research team in the United States under the leadership of Grand [9] examined two groups of schizophrenic patients, describing them in terms of their response times to refer to colors. The team divided the patients into two communities called. "Belligerent", which means of those with active and hallucinatory production and "isolated" – those that are closer to chronifikation of psychotic disorder and emotional adjustment. "Active" group in this study has shown clearly on – quick response time refer to the colors in comparison with the group of "isolated". Moreover, the results of the active group were placed as indicators as very similar to those summarized in the psychological literature, results from non-patient groups. In that case it seems difficult to make – a precise explanation for these symptoms profiles of various groups that participated in that study. However, relying on such a description, it seems perfectly acceptable to generalize the so-called "Active" group included more patients with a profile of positive psychotic symptoms, while in the "isolated" we would probably encounter more patients with negative symptoms in psychotic state development. This fact, although

indirectly, seems serious evidence that patients with positive symptoms would be noted in – high rating scales in investigating potential reference activity, compared with a group of patients with negative symptoms.

In another study on the subject Dodd and Buchi [6] reported data that examined the reference activity and orientation in the process of reality among groups of normal functioning and psychotic patients. In its review of the literature study, a team of researchers found a similarity of results with development issues in the processes of orientation in the functional psychoses and in – a small degree of data relating to individuals operating within the clinical norm. Similar conclusions we refer to studies conducted and cited during Krepelin [2] that the difficulties of orientation are indicative of the clinical status of schizophrenia. As in the perceived widespread and routine psychiatric practice [2, 93] to study mental status usually asks the patient who believes that he is now where he thinks is and what is the current date. Dodd and roaring out that research results concerning the processes of disorientation due to the beginning psychosis or state of intoxication of individuals, suggest that disorientation of time, space and personality is happening in this sequence. Studies on recovery of patients following a electro-convulsive therapy suggest that the processes of recovery of orientation after the sequence: person, space and best – finally time. Described construct is consistent with the loss of orientation in the pelvis reason to suspect the possibility of presence of cognitive processes on the mechanism of orientation.

Buchi and Dodd also noted the scarcity of data on problem orientation among individuals in a clinical rule to develop their own explanation, they turn to psychological studies in literature and memory – in particular the work of Leshli [13], which emphasizes the importance the context, including identifying and remembering the person, space and time in helping to reproduce memory traces. Studies of Neyser [14] and Talving [18] also confirm the importance of context in the organization and reproduction in memory. Tulving distinguish between semantic memory system and the area of episodic memory, considering that episodic memory is organized around the context of events in their specific spatial, temporal and affective characteristics, in accordance with its content. Thus presented episodic memory has the potential to store experiential sensory and affective information, which makes this construct corresponding to the concept of nonverbal memory in multiple code model.

In their study Dodd and Buchi turn to healthy functioning and psychotic patients are not diagnosed with any disease schizophrenia – asking them to tell their interesting experience story. Such a proposal is a standard instruction for the Study of reference activity. Stories are evaluated for consistency in the orientation to time, space and personality, as well as in terms of latency of orientation. Latency is measured as a percentage of the extent to which the listener is experienced in the overall story forward, before the narrator has given direction to the person place

and time. Reference activity in these groups and tell stories was recorded and compared with the method of Buchi Wilma the wealth and depth of emotional speech. Levels of activity in the reference guide telling stories is significantly – higher in those tested individuals who – quickly orient and guide their listeners. Clinically healthy individuals orient their listeners significantly – faster compared with psychotic patients. The difference in orientation seems directly related to the trend in well-functioning individuals to put in a quick timely manner spatial – temporal context. Both groups bring their characters in the story at about the same distance of time. The group of normally functioning individuals, 81% of surveyed persons bring time and space of history before the appearance of characters, respectively. personality. In comparative terms the group of psychotic patients 51% do so. In this sense, can be described as a tendency in normal personality sample before placing in context the introduction of the characters involved in the action of the story. The described trend is significantly lowered in the accounts of psychotic functioning individuals and explains some of the difficulties and confusion that characterizes the style of communication in psychotic patients.

In trying to summarize in comparison to traditional models of mental activity – two-component cognitive code defined by Paivio and psychoanalytic conception of personality, particularly in a state of psychosis at first look will be faced with many differences. Thoughts and direction of research in the perspective of the binary model is focused on the primary visual image symbolized as well as non-verbal cognitive components, leaving out of account the vast area of pre-symbolic functions in all their modalities and further away – the complex of mechanisms that can promote the integration of these processes with the language. Thus the model of binary code fails to build a specific understanding of reference processes and understanding the limits of their operations. On the other hand Sigmund Freud's model of the physical device apparatus with ideas for primary and secondary psychic processes, levels of conflict and resistance difficulties in this research to provide a satisfactory explanation of psychological situations in the learning lives of people through the system of libido investments concepts. Buchi believes that its primary variant of Freud's model is unadapted to build a comprehensive understanding of the intensive operations in many systems of information processing within the normal conscious psychic life, as well as the phenomena of the specific difficulties of the transfer of information between systems representations characteristic of all systems of information protsesirane personality.

Important component of the theory of Buchi Wilma is the fact that the various aspects of the reference activity presented in the language are easily measurable by psychological instruments and computerized psychometric there are programs that can be a valuable aid for psychological research in the field of mental and emotional dynamics development. The concept of multiple code has very good links to the ideas of the early development of children formulated by Margaret Mahler

and perspective of the attachment theory of stages in the wounds of life associated with the name of Boulbi and Fonagi. Assumptions deficits in early emotional development and their influence in the further development of psychotic personality functioning fully adopt the concept of the reference activity, corresponding to the descriptive constructs of mentalization. Buchi states as the leading motivation for young children and proximity search familiarity with important adult. In continuing correspondence with Boulbi author notes that motivation is a basic element of emotional organization. In this plan, selected the more – severe pathology and dissociation are in emotional life, the better – are severe dysfunction in mental life of individuals, usually resulting in states of disease and shizofrenno similar to psychotic states. Picture this severe mental distress theory code indicating the implications of the lack of an organized around symbols emotional circuit and the lack of consistent organizing mental activity in children aged human objects.

With these proposals to the theory of reference activity provides a very favorable field for psychological research, and upgrade valuable directions for better understanding of psychopathology and emotional disturbance in mental functioning.

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PHONOLOGICAL AWARENESS IN CHILDREN WITH ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) AND DYSLEXIA

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Abstract. *Objective: The purpose of the study is to understand the interrelationships between Attention-Deficit Hyperactivity Disorder (ADHD) and Dyslexia in assessing basic phonological skills. We hypothesize that ADHD do not reflects the phonological ability, so the mistakes that the children with ADHD made are not reflection from comorbidity or associated development of dyslexia. Method: Assessing skills. Setting: Primary schools. Subjects: The method includes 3 groups– group of ADHD (n=40), group of Dyslexia (n=40) and 40 normal controls. Each group consists of non equal numbers boys and girls at age between 9–12 years. They were diagnosed by the ICD–10 criteria by the expert team. All computations have been done by SPSS (V.15). Material: Phonological skills test, which consists of three subtests: 1) reading pseudowords; 2) reading regular words; 3) spelling words. Procedure: Each child was assessed individually in the office of the school psychologist. The child was given the test and the instructions. Results: There is qualitative and quantitative difference between each experimental group and the controls (p<0.05). Each group demonstrates unique reading mistakes. Conclusion: The core deficits in ADHD and Dyslexia seriously affect basic reading skills, but only children with Dyslexia show phonological deficit.*

Keywords: *Attention Deficit Hyperactiviy Disorder (ADHD), Dyslexia, Phonological Awaremess, pseudowords*

INTRODUCTION

In recent years, many researchers have explored the relationship between phonological awareness and success with reading and spelling. Phonological awareness is the area of oral language that relates to the ability to think about the sounds in a word (the word's phonological structure) rather than just the meaning of the word. It is an understanding of the structure of spoken language–that it is made up of words, and words consist of syllables, rhymes, and sounds. Fitzpatrick summarizes it best by saying that phonological awareness is "the ability to listen inside a word" (Fitzpatrick, 1997).

Children who have well-developed phonological awareness when they come to school have a head start making sense of how sounds and letters operate in print. This ability is important for using sound-letter knowledge effectively in reading and writing. In fact, a student's level of phonological awareness at the end of kindergarten is one of the strongest predictors of future reading success, in grade one and beyond. Many children begin kindergarten with well-developed phonological awareness. Some seem to develop these skills fairly easily within a stimulating classroom environment, while others need more instruction that consciously and deliberately focuses on phonological awareness. More than 20 percent of students struggle with some aspects of phonological awareness, while 8–10 percent exhibit significant delays. Early intervention is crucial and can make a real difference to students with limited levels of phonological awareness (Cunningham et al., 1998).

There are different levels of phonological awareness within words: syllables, onsets and rimes, and sounds. Recognizing this has important implications for supporting students' development of phonological awareness. Good readers look for familiar "letter patterns" as one strategy when attempting to decode or spell unfamiliar words–they use familiar sound chunks from known words, not just individual sounds. Thomas Gunning says that students look for "pronounceable word parts". This "chunking" of sounds makes the reading and spelling process much more effective and efficient. These letter patterns are based on familiar syllable or rhyme patterns as well as sound clusters and individual sounds (Snow, 1998).

This ability to look inside words for syllables, rhymes, and individual sounds when reading and spelling is based on the student's phonological awareness. Students have to be able to segment, blend, and manipulate syllables, onset and rime, and sounds if they are going to be successful in using letter-sound knowledge effectively for reading and writing. The phonological awareness skills of segmenting and blending are the most highly correlated with beginning reading acquisition (Snow, 1998).

Students with a good understanding of phonological awareness have the underlying framework in place for reading (decoding) and writing (encoding) when

letter–sound correspondences (phonics) are learned. Students who have difficulty with phonological awareness can often learn "phonics" (knowledge of letters and sounds), but they have difficulty *using* this knowledge as they read and spell. So, if students are expected to use letters and sounds as a source of information or cueing system as they read and spell, it is important to ensure that all students have well-developed phonological awareness. Students who have difficulty with this area of language (approximately 20 percent) will struggle through school in figuring out *how sounds work in print.* They will not be able to use sound knowledge effectively because they will not have the underlying ability to "listen inside a word" and "play with the sounds" they hear (Adams et al., 1998).

There are some learning disorders that are strongly connected with problems in learning to read. The development of decoding and coding skills is affected by the core deficit of the disorders. The most common learning disability is Dyslexia. It has been around for a long time and has been defined in different ways. For example, in 1968, the World Federation of Neurologists defined dyslexia as "a disorder in children who, despite conventional classroom experience, fail to attain the language skills of reading, writing, and spelling commensurate with their intellectual abilities." According to the U.S. National Institutes of Health, dyslexia is a learning disability that can hinder a person's ability to read, write, spell, and sometimes speak. Dyslexia is the most common learning disability in children and persists throughout life. The severity of dyslexia can vary from mild to severe. The sooner dyslexia is treated, the more favorable the outcome; however, it is never too late for people with dyslexia to learn to improve their language skills (Goswami & Bryant,1990).

Children with dyslexia have difficulty in learning to read despite traditional instruction, at least average intelligence, and an adequate opportunity to learn. It is caused by an impairment in the brain's ability to translate images received from the eyes or ears into understandable language. It does not result from vision or hearing problems. It is not due to mental retardation, brain damage, or a lack of intelligence " (Adams et al., 1998).

Dyslexia can go undetected in the early grades of schooling. The child can become frustrated by the difficulty in learning to read, and other problems can arise that disguise dyslexia. The child may show signs of depression and low self-esteem. Behavior problems at home as well as at school are frequently seen. The child may become unmotivated and develop a dislike for school. The child's success in school may be jeopardized if the problem remains untreated (Cunningham et al., 1998).

Classroom teachers may not be able to determine if a child has dyslexia. They may detect early signs that suggest further assessment by a psychologist or other health professional in order to actually diagnose the disorder. Letter and number reversals are the most common warning sign. Such reversals are fairly common

up to the age of 7 or 8 and usually diminish by that time. If they do not, it may be appropriate to test for dyslexia or other learning problems. Difficulty copying from the board or a book can also suggest problems. There may be a general disorganization of written work. A child may not be able to remember content, even if it involves a favorite video or storybook. Problems with spatial relationships can extend beyond the classroom and be observed on the playground. The child may appear to be uncoordinated and have difficulty with organized sports or games. Difficulty with left and right is common, and often dominance for either hand has not been established. In the early grades, music and dance are often used to enhance academic learning. Children with dyslexia can have difficulty moving to the rhythm of the music (Snow, 1998).

Auditory problems in dyslexia encompass a variety of functions. Commonly, a child may have difficulty remembering or understanding what he hears. Recalling sequences of things or more than one command at a time can be difficult. Parts of words or parts of whole sentences may be missed, and words can come out sounding funny. The wrong word or a similar word may be used instead. Children struggling with this problem may know what they want to say but have trouble finding the actual words to express their thoughts (Fitzpatrick, 1997).

Many subtle signs can be observed in children with dyslexia. Children may become withdrawn and appear to be depressed. They may begin to act out, drawing attention away from their learning difficulty. Problems with self-esteem can arise, and peer and sibling interactions can become strained. These children may lose their interest in school-related activities and appear to be unmotivated or lazy. The emotional symptoms and signs are just as important as the academic and require equal attention (Snow, 1998).

Another disorder that affects the school performing is Attention-deficit hyperactivity disorder (ADHD). It is a neurobehavioral (National Institute of Neurological Disorders and Stroke, 2007) developmental disorder (Zwi et al., 2000). ADHD is primarily characterized by "the co-existence of attentional problems and hyperactivity, with each behavior occurring infrequently alone." (Biederman, 1998). While symptoms may appear to be innocent and merely annoying nuisances to observers, „if left untreated, the persistent and pervasive effects of ADHD symptoms can insidiously and severely interfere with one's ability to get the most out of education, fulfill one's potential in the workplace, establish and maintain interpersonal relationships, and maintain a generally positive sense of self" (Ramsay, 2007).

ADHD is the most commonly studied and diagnosed psychiatric disorder in children, affecting about 3 to 5% of children globally with symptoms starting before seven years of age. ADHD is a common chronic disorder in children with 30 to 50% of those individuals diagnosed in childhood continuing to have symptoms into adulthood. Adolescents and adults with ADHD tend to develop coping mechanisms to compensate for some or all of their impairments. However, many

aspects of daily life that most people take for granted are rendered more difficult by the symptoms of ADHD (Biederman, 1998).

Though previously regarded as a childhood diagnosis, ADHD can continue throughout adulthood (Dulcan, 1997). 4.7 percent of American adults are estimated to live with ADHD. ADHD is diagnosed two to four times as frequently in boys as in girls (Sciutto et al., 2004), though studies suggest this discrepancy may be due to subjective bias of referring teachers (Cohen et al., 2006). ADHD management usually involves some combination of medications, behavior modifications, lifestyle changes, and counseling. Its symptoms can be difficult to differentiate from other disorders, increasing the likelihood that the diagnosis of ADHD will be missed (Ramsay, 2007) or vice versa. Additionally, most clinicians have not received formal training in the assessment and treatment of ADHD, particularly in adult patients (Ramsay, 2007).

ADHD and its diagnosis and treatment have been considered controversial since the 1970s. The controversies have involved clinicians, teachers, policymakers, parents and the media. Opinions regarding ADHD range from not believing it exists at all to believing there are genetic and physiological bases for the condition as well as disagreement about the use of stimulant medications in treatment. Most healthcare providers accept that ADHD is a genuine disorder with debate in the scientific community centering mainly around how it is diagnosed and treated (Sim et al., 2004). The AMA Council on Scientific Affairs concluded in 1998 that "(d)iagnostic criteria for ADHD are based on extensive empirical research and, if applied appropriately, lead to the diagnosis of a syndrome with high interrater reliability, good face validity, and high predictability of course and medication responsiveness (Sim et al., 2004).

METHODOLOGY

We choose toe assess phonological skills in three areas: 1) reading single words; 2) reading pseudowords and 3) spelling words. The three types of stimuli material s are a part of larger test for assessing basic school skills in children. The stimuli for reading single words consist of 20 single words with different structure and frequency of usage. The second group of stimuli consists of 20 single psewdowords, constructing on the principle of known words and nonexistent words. The third group stimuli consist of 20 words for spelling. The children ahs to read aloud the word and psewdowords, and to spell the given list of words. For each correct answer the child was given 1 point. For missing or wrong answer the child was given 0 points. The maximum result in each stimuli group is 20 points. We choose two experimental gropus—40 children with ADHD and 40 children with Dyslexia. They were students in public schools in Sofia. We form a control group with 40 children. All participants were at age between 9–12 years.

RESULTS

Reading single words

The task for reading aloud single word shows difference in the there groups. Children in norm have maximum results and do not demonstrate any difficulties in reading single words. Children with dyslexia show the lowest results. They have men 16,8. The mean of ADHD group is 18, 2. The descriptive statistics are given in the Table 1.

TABLE 1. READING SINGLE WORDS

	Dyslexia	ADHD	Controls
Number	40	40	40
Mean	16,8	18,2	20,0
Minimum	12,0	16,0	20,0
Median	17,0	18,0	20,0
Maximum	20,0	20,0	20,0
St. Deviation	2,0	1,5	0,0

From the descriptive statistics we could see that there is statistical difference between the results in the three groups. Each of the group has different qualitative and quantitative types of mistakes. Our first hypothesis is proved where children with ADHD and Dyslexia show different number and kind of the mistakes. The qualitative analyzes we discuss later. Figure 2 graphically shows the results of the three groups.
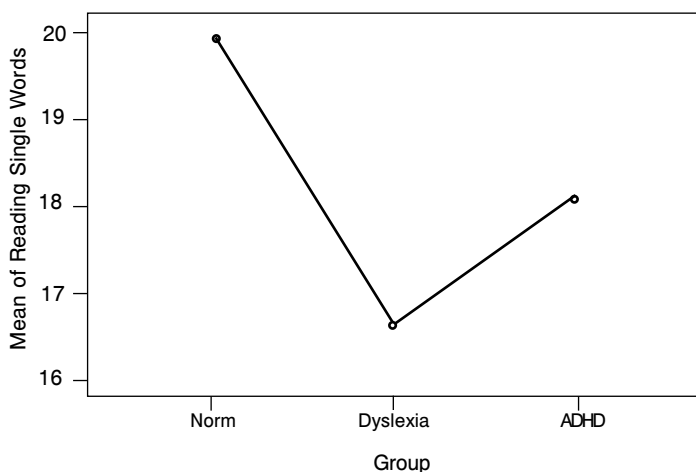
FIGURE 1. READING SINGLE WORDS

Reading pseudowords

Reading pseudowords is a well formed skill in children in norm. They show maximum resut–20 points. The greatest problem is in children with ADHD. They have mean of 13,5. As a comparison, the second experimental group of children with ADHD show results close to the norm–19,3. There is a statistical difference between the results of children with Dyslexia, ADHD group and the controls. There is no statistical difference between the controls nad ADHD group (Table 2).

TABLE 2. READING PSEUDOWORDS

	Dyslexia	ADHD	Controls
Number	40	40	40
Средна стойност	13,5	19,3	20,0
Minimum	9,0	18,0	20,0
Median	14,0	19,5	20,0
Maximum	18,0	20,0	20,0
St. Deviation	2,2	0,7	0,0

Figure 2 graphically shows the results of the there groups. On the bottom of the table are the men of Dyslexia group. The ADHD and the controls have close results.
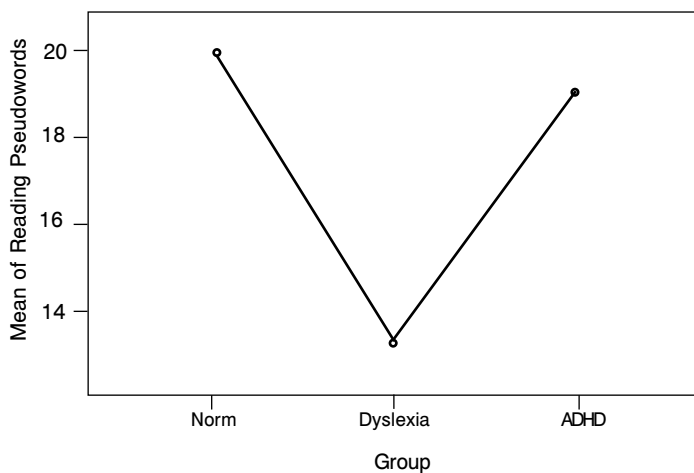
FIGURE 2. READING PSEUDOWORDS

Spelling words

Table 3 shows the descriptive statistics of the three groups. There is a statistical difference between the means. The controls show the highest result–18,6, in the middle, but very close to the norm are children with ADHD–17,6. Children with Dyslexia have the greatest problem and show result.

TABLE 3. SPELLING WORDS

	Dyslexia	ADHD	Controls
Number	40	40	40
Mean	9,0	17,6	18,6
Minimum	0,0	8,0	8,0
Median	8,0	19,0	19,0
Maximum	20,0	20,0	20,0
St. Deviation	5,7	3,1	2,2

Figure 3 graphically shows the results of the there groups. At the bottom are the mean of children with Dyslexia. The results of controls and ADHD group are very close.
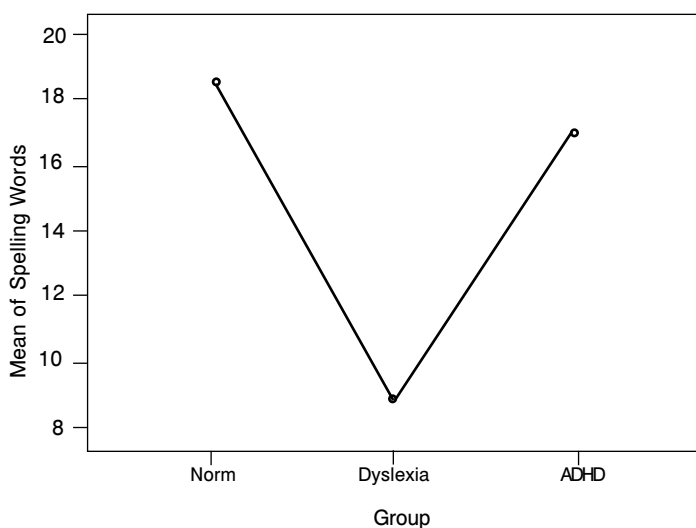
FIGURE 3. SPELLING WORDS

DISCUSSION

Our research shows that there is significant problem with phonological awareness in children with Dyslexia. They have great difficulties in reading allowed single words, epically when the words ate knew, long or has difficult structure. Their peers with ADHD do not show significant problems with decoding skills. Even the core deficit is connected with attention deficit and disinhibition; it does not affect basic phonological skills and basic decoding skills in reading. Children with Dyslexia read globally, in top-down manner, they see the common words as pictures, they not discriminate the letters in the words.

The item for reading aloud single pseudowords are indicative for strongest problems in phonological awareness in children with Dyslexia. The have great difficulties, they could not read the words, making a lot of mistakes, trying to guess the meaning. The core deficit is connected with phonological processing. That is way for these children is so difficult to decode pseudowords. Children with ADHD have little problems in reading pseudoword. Their results are close to the results of the controls. The problems with the attention and disinhibition do not affect the phonological awareness and decoding skills for reading.

The item for spelling words, again show significant difference between children with Dyslexia and their peers in norm and children with ADHD. Phonological deficit affects the area of spelling words. That makes it difficult to read and write correctly.

Dyslexia is disorder of phonological processing deficit and affects all the area of reading decoding and spelling. ADHD does not affect the phonological skills and for ADHD children reading would not be an academic difficulty.

CONCLUSION

The development of literacy skills is one the most important thing for every child. Children with special educational needs, such as those with Dyslexia and ADHD have some difficulties in academic area. Children with Dyslexia show great problems with phonological awareness in the level of reading aloud single words, single pseudoword and spelling. So they demonstrate serious problems in learning to read and write. Their peers with ADHD do not show great problems in phonological awareness. They have satisfactory decoding and phonological skills. Our research shows that there will be different academic instructions for each exceptional group. At the same time, the test for phonological awareness could serve and help the differential diagnosis of ADHD/Dyslexia and norm.

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PROBLEMS OF VIRTUAL PSYCHOLOGICAL COUNSELLING: LESSONS LEARNED

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Abstract. *With the more extensive involvement of electronic communications in all aspects of healthcare delivery, understanding consumers' attitudes toward virtual psychological services is essential. This paper focuses on results of two surveys assessing consumers' attitudes toward telepsychology service and is part of project OHN 1514/2005, funded by National Science Fund, Bulgaria. The influence of individual differences (age, gender and education) and personality (level of anxiety, locus of control) at clients' attitudes towards virtual psychological consultations are addressed. Data revealed that clients:*

- Are ready to use and are actively looking for virtual psychological consultations;
- Clear age and gender differences are revealed in the needs and readiness for e-psychology support;
- Clients' preferences are to exploit more user-friendly communication channels, giving possibility for back-up of sessions' content;
- Level of anxiety and locus of control influence the perception of telepsychology and the preferable communication channel with licensed psychologists;
- Attitude towards reimbursement of virtual psychology consultations is also influenced by individual and personality differences. The results are compared with studies in other European countries.

Keywords: *telepsychology, age and gender differences, anxiety, locus of control, reimbursement*

INTRODUCTION

Telepsychology is the provision of psychological services in a technology-assisted environment, including telephone, Internet media (written, voice and digital pictures) and video conferencing (Campos, 2009). The essence of telepsychology is a detailed sharing of information between a psychologist and a client aiming at creating a basic therapeutic alliance. The difference from face-to-face psychology consultation is that telepsychology contacts are performed in the virtual space despite of the fact that sessions are structured in a similar way as they are structured during face-to-face meetings.

Telepsychology is closely related to the history of Internet. Discussions about utilization of the net for the needs of psychology began almost 40 years ago with the start of Internet's prototype – the project ARPANET in 1969. It was when man first went to space that the necessity for further development of telepsychology became a reality. Both Russian and USA space programs were actively working in this field at first separately and in closer cooperation after 1990s. A number of psychological issues that may affect people working in space as well as in polar settings or in isolation have been identified. To cope with these problems various virtual psychological monitoring and support strategies were developed (Kanas et al., 2002; 2007; Johannes et al., 2008; Hoermann et al., 2008).

Unfortunately, terrestrial psychology has to solve the problem with virtual psychology support in its own way, using scarcely published pieces of information.

Telepsychology, for terrestrial applications, was facilitated by the explosion of World Wide Web in 1990's. Today Internet is used to provide psychological services to people all over the world. The utilization of information and communication technologies for online counselling and therapy is one of the most interesting and at the same time rather controversial areas of contemporary psychology.

In general, telepsychology is used when face-to-face contact with licensed psychologist is impossible due to lack of transport, long distance, extreme situations, etc. Virtual consultations are alternative, especially for people who cannot afford private consulting (as in most countries psychology support is not reimbursed by health insurance funds), or for those who are afraid to speak about their difficulties face to face to a counselor as well as for those who want quick answers. To put it briefly, thanks to the development of new information and communication technologies this service is available and is an option for rapid psychological consultations, while at the same time expands the group of potential users of psychological help.

METHODOLOGY

Two surveys, studying clients' attitudes towards virtual psychology consultations, were performed in 2006 and in 2008 as part of project OHN 1514/2005 funded by National Science Fund, Bulgaria and Bulgarian Academy of Sciences. The reason

to conduct these surveys was that project's goal was to develop and offer a virtual, high quality, psychology support to people from remote areas that have no contact with licensed psychologists. When starting the project no data about attitudes of Bulgarian costumers towards virtual psychology were found.

The objectives of both surveys were to study clients' attitudes and demands when telepsychology is concerned. Total of 603 subjects, aged 18–65 yrs old, divided in 5 age groups, took part in the studies performed via Internet.

Participants took part in the studies voluntarily, anonymously and had the right to withdraw. Questionnaires adapted for web applications were applied. Questionnaires were published online at the website of Psychology-Bg.com.

RESULTS AND DISCUSSION

WHO WILL USE TELEPSYCHOLOGY

As a first step, we were trying to find out whether potential clients are ready to use Internet as a media to receive psychological help and/or advice or prefer face-to-face contact with the expert.
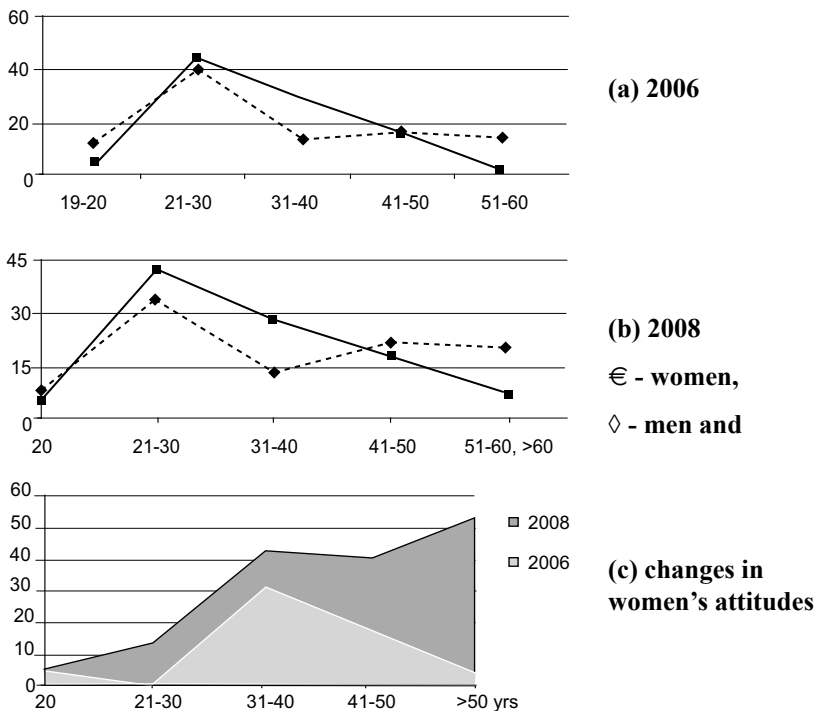
FIGURE 1. Age and gender differences (%)

The results were more than promising – almost 77% of participants were ready to use virtual psychology support. The difference between 2006 and 2008 was not significant. It is important to underline that almost ¾ of these clients are with colleague or university education.

Clear age and gender differences were also revealed (Figure 1 a, b). Till late 20's both sexes need and look for psychological help, while after that age the interest of women gradually declines. The decline is very sharp in men in the 4th decade of life. Around the age of 50 men again start looking for psychological support, which probably is related to the middle age crises.

Comparing the samples of women 2006 vs 2008 a clear tendency for increasing the acceptance of telepsychology service was also revealed (Figure 1 c). More and more women, especially after the age of 40 years are ready to use virtual psychology help. All of them are working women, with secondary or mainly high education, engaged in the offices 5 days a week. Tele-support for them is a gift "from heaven".

PREFERENCE IN COMMUNICATION

Another important question was about the preferred communication channel with licensed psychologist (Figure 2). Despite of our expectations, within 2 years period, the preference of e-mails as a main communication source dropped with 20,2%. At the same time, both Skype program and video programs gained strength. The preference of Skype had increased with 8,6%, while the amount of video supporters – with 5%. An explanation of the revealed difference in the preferable communication channel is that Skype, as a user-friendly, free of charge or a very cheap program, became more popular. In addition, it combines possibilities to use written and/or voice messages and video plus the benefit of providing storage of written communication for further analyzes.
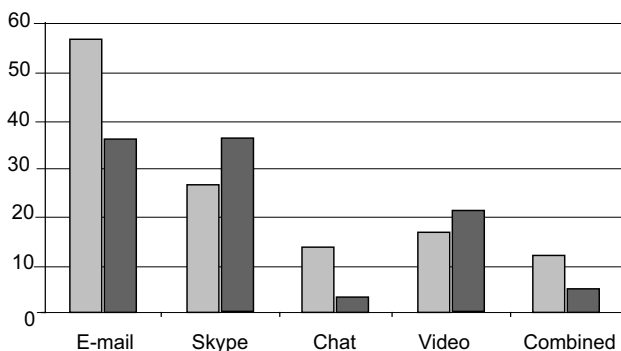
FIGURE 2. Preference of communication channels (%)

That's why users feel reluctant to use it. This result also reveals that if professionals would like new communication technologies to be accepted as unavoidable part of psychology services, more attention has to be dedicated on the advertisement and making information and communication technologies user friendly and acceptable in citizens' everyday life. This may ensure the gradual acceptance of tele– services.

PERSONALITY AND TELEPSYCHOLOGY

Anxiety level was evaluated in 153 subjects and they were distributed in 3 groups – with low, moderate and high level of anxiety.

Data reveal that anxiety influences the attitude towards virtual psychology (Figure 3). As anxiety increases, the acceptance towards virtual psychology support is also linearly increasing. There is a statistical significant difference in the attitudes of subjects with moderate and high level of anxiety ($\chi2=0.01065$, $p<0.05$).

Clients are also changing their preference towards the way to communicate with experts with the increase of anxiety level. Low anxiety users prefer Skype program, e-mails and video communications are less preferable. As the level of anxiety increases, the preference changes towards e-mail. Perhaps this is due to the fact that e-mails are still considered a reflection of ordinary paper letters and are accepted as more structured source of communication. The Skype loses its dominating position but remains as a second choice while chat and video are far behind. Let's not forget that Skype allows saving a back-up of the contact's content with psychologist for further analyses, training and revision. Statistically significant are the differences between low and high anxiety groups for the application of all communications: e-mail/ Skype ($\chi2= 0.02969$, $p<0.05$); chat and video ($\chi2=0.00415$, $p<0.05$); as well as between groups with low and moderate level of anxiety for the communications via chat and video ($\chi2=0.00025$, $p<0.05$).
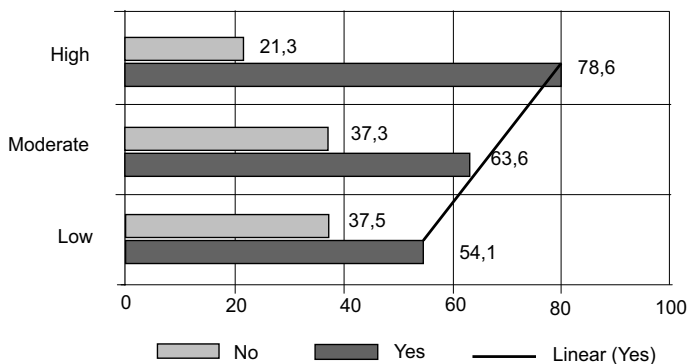
FIGURE 3. Anxiety level and acceptance of virtual psychology (%)

As anxiety increases clients become more fixed on details. They start looking for additional information about the consulting psychologist such as sex, age, marital status, professional information. The difference low – high anxiety group is statistically significant ($\chi2=0.01065$, $p<0.05$).

Locus of control is another characteristic that influence clients' attitude toward telepsychology. Two groups – one consisting of individuals with extreme external locus of control (ELC, N=22) and another with extreme internal locus of control (ILC, N=36) were compared. Individuals with mixed locus of control were excluded from the analyses.

Data revealed a statistically significant difference based on locus of control:

50% of participants with ILC and 81,8% of those with ELC are ready to use e-psychology counseling ($\chi2=0.00194$, $p<0.05$).

Although 38,88% of clients with ILC and 13,68% of those with ELC will not run "the risk" of searching virtual psychology consultations, the difference is not significant.

There are also differences in the preferred communication channel for contact with licensed psychologist. E-mails are preferred as main communication source by clients with ILC (52.72%). Both Skype program and video programs also gained strength. But e-mails are leading the statistics. There are many possible explanations – the fact that e-mails resemble so much ordinary mails; that they give the opportunity to create a text talk; many people feel that they can express themselves better in written words, etc. Let's not forget that e-mails usually do not occur in real time. This is essential for clients as it gives time to think, evaluate and compose messages in a most appropriate way. Last but not least, e-mail exchange enables the record of interactions by saving the text messages

Clients with ELC are keener to applying Skype and Chat programs as the latter give possibility to more direct and vivid, even online, interaction. Unfortunately, perhaps due to the relatively small groups, the only significant difference ($\chi2= 0.00078$, $p<0.001$) is with the Chat program.

REIMBURESMENT

Are clients ready to pay for telepsychology help? Only 36,6% of clients are ready to pay for virtual consultations. Figure 4 presents the results. At first glance the payment may seam extremely low but it is essential to underline that: First, there is no adequate reimbursement model for psychology consultations even via the insurance funds. Psychology (not only in Bulgaria) all over the world is still the Cinderella of healthcare system. Second, reimbursement of all kinds of eHealth applications, including telepsychology, is an issue to be solved in the years to come at local, national and European level. Last but not least, the attitude towards payment is not an exception. As part of another survey in 2007, 52 eHealth experts

from different countries answered various questions, one of them – focusing on payment for telemedicine services. The results were similar – 80,5% agreed on payment not exceeding 20 Euro (Figure 4 c). Similar results were presented by Chronaki (2007) studying the consumer attitude towards eHealth services – 70.7% of the Greek respondents favoring the service, were willing to pay 10€ for each tele-visit.

Personality characteristics as locus of control influenced reimbursement. 47,2% of ILC participants and 54,54% of ELC participants are ready to pay for virtual psychology support. The difference in both groups is $\chi 2=0.04214$, $p<0.05$. It is not surprising that ELC clients are more reluctant to offer reimbursement for distant psychology consultations / help as their believes are that their own behavior doesn't matter much and that rewards in life are generally outside of their control. In this case – it is the licensed psychologist who will control and solve their problems.
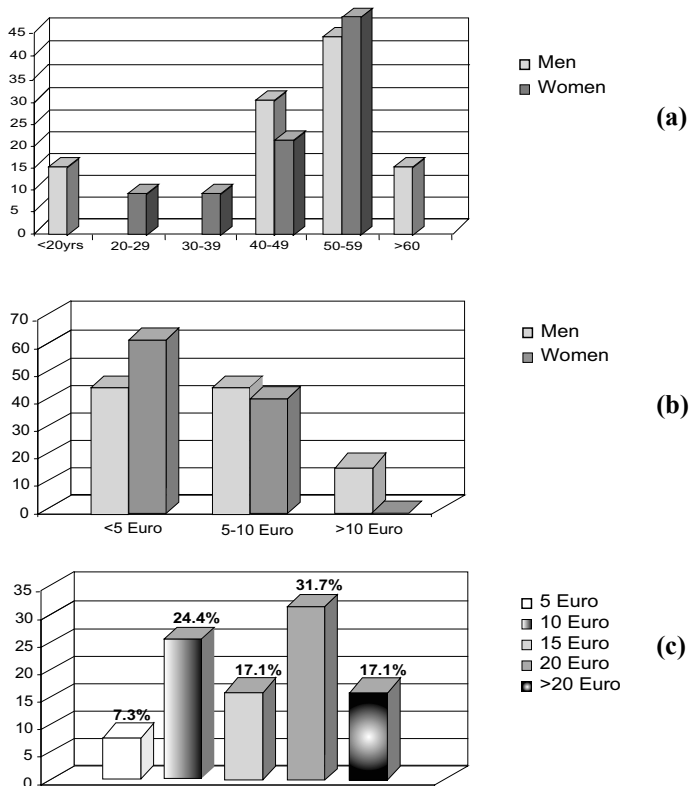
FIGURE 4. (a) Percentage of clients ready to pay, b) Amount of payment, (c) International study

CONCLUSIONS

We would like to underline that telepsychology is a fantastic opportunity for those who need psychological help no matter where the client is situated and at what time of the day or the night he/she needs to receive psychological support. Telepsychology musters up strength but lots of advertisement is needed in order to reach potential clients.

For those that are planning to introduce virtual psychology in their practice, we would like to propose some recommendations:

- Applying personality tests priory the begging of telepsychology consultations is not a waste of time. The tests are rather quick and the efforts are paid off;

- Based on our experience about 34% of all requests for virtual support are during the weekend. Most of them – ~ 20% – on Sunday;

- Regarding the time of the day – the greatest activity is between 7–8 pm (7.41% of the requests), followed by the period 0–2 am, 11–12 am and 4–5 pm. Each of the last 3 time intervals is responsible for 6.48% of consultations requests.

- A seasonal activity was also observed. Spring (March, April and May) and beginning of the autumn (August, September and October) are the months characterized with the highest numbers of consultation requests.

- No need to be afraid of the wide introduction of telepsychology. Studies revealed that it is as effective as as conventional treatment when some psychology disorders as depression, panic disorder and post-traumatic stress are concerned (Lange et al., 2001; Carlbring et al., 2003; Farvolden et al., 2003). As a result of virtual treatment more than 80% of the patients reduced their symptoms and improved their health. In addition, 68% of telepsychology clients said that they had never been in therapy before contacting a therapist via the Internet (Ainsworth 2005). In other words, most of the clients of telepsychology are people for whom traditional psychology is not accessible. The reason may be a stigma, life in remote areas, etc.

- It is not news that traditional psychology serves only a part of the population who need it. Around 60% of those people who start with telepsychology lately are searching for face-to-face psychological consultations.

This paper does not answer all possible questions. Further research is needed for revealing the personality issues concerning virtual psychology counseling.

ACKNOWLEDGEMENTS

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IMMIGRATION, URBANIZATION, CENTERS FOR FAMILY CONSULTING: THE EXAMPLE OF CENTER FOR FAMILY CONSULTING IN YAKACIK-ISTANBUL

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Abstract. *The aim of this research is bring in community center as a kind of psychological, social and educational helping center. Community centers in an attempt to help people who immigrated from countryside to urban are founded by Prime ministry Turkish government. Yakacık Community Center is founded in 2000. Dated from foundation it carry out a lot of functions. This investigation is survey type a retrospective research. Data was collected by using community center record. Since last year here it's practices: There are approximately 200 000 people expatriated from east Anatolia Region to İstanbul that Yakacık Community Center serve up service them. During 2008, 209 adult, 150 in early childhood period child were educated and 75 children who attend to school were given educational support. 340 adult and children were educated in field kind of art . In addition to practiced family therapy, group therapy them that about conflicted spouse, exposed violence, divorced et cetera. 50 women received psychological support. Besides telephone guidance was given. The migrants' adjusting urban is the most problem for İstanbul.*

Keywords: *Internal migration, Urbanization, Community Center, İstanbul*

INTRODUCTION

In the context of population mobility in Turkey over fifty years, immigration from the Eastern and Southeastern Anatolia Regions towards metropolis occurred especially in the last twenty years (Gözlügöl, 2006). According to Gürbüz and Kurt (2006) "mandatory immigration" was experienced in Turkey between the years of 1989 and 1999 due to security and terror. Of the movement of immigration in that period, 71.6% happened between the years of 1990 and 1991. This immigration had a negative effect on social structure, eco-

nomical, cultural and psychological atmosphere of the country (Gürbüz, 2006 ; Yüceşahin and Özgür, 2006).

Population of the region immigrated to metropolis due to unsecure conditions caused by separatist armed groups (PKK terrorist organization) (Barut, 2002; Yüceşahin and Özgür, 2006). A major part of those people have to live in insanitary conditions and houses in tenement districts. They are deprived of adequate work and income facilities. Education level of them is low and they compose unqualified labor force. All these realities make living condition in metropolis difficult for this population (Gürbüz, 2006). Firstly economic problems, educational problems and not being integrated with the metropolis are main problems. This poses a problem for both the immigrating population and the inhabitants of the city. Centers for family consulting were founded in 2000 in order to assist immigrating people for participation, productivity and self-sufficiency. They provide service for immigration-receiving regions, tenement districts and development priority regions. Centers for family consulting provide service for children, youth, women, men and handicapped groups who are affected from immigration and deprived of equal opportunities in terms of protective, preventive, educational, improving activities. Especially empowerment of family and woman as an individual and provision of participation in production are essential (Turkish Social Service and Children Protection Center (SHÇEK), 2008). There are 80 centers for family consulting in Turkey and eight centers in Istanbul as of May 2009. İstanbul Yakacık Center for Family Consulting (YTM), environment of the study, was founded in order to assist a district with 200 thousand population. The support of Public Education Centers, universities and non-governmental organization are taken while providing services in these centers.

The aim of the present study is to analyze the services in Yakacık Center for Family Consulting according to years and fields of services.

METHODOLOGY

The present study uses survey method and it is a retrospective study. Data was collected from the service records of 200 thousand people who immigrated and settled into Yakacık district of Istanbul. Serviced provided between the January 2000 (the date of foundation of center) and December 2008 were retrospectively analyzed, grouped and classified according to field of services. The data was evaluated according to some variables. Frequency and percentiles were calculated and given in tables. All recorded data correspond to a service.

Titles of problems composing service fields in the present study are as follows: Domestic Problems, Heath Problems, Educational Problems, Economic Problems and Demands for Social Cultural Activity. Within the scope of Domestic problems, sub-titles are as follows: Disagreement between Couples, Divorce, Leaving

Home by a Member of the Family, Domestic Violence, Addiction to Alcohol etc in the Family, Marriage Desire, Child Abuse, Disagreement between Parents and Children, Demand for Women's Shelter, Demand for Free Care of Centers. Sub-titles are as follows within the scope of health problems: Handicap in Members of the Family, Psychological Problems, Demand for Benefiting from Health Services, Addiction to Volatile Substances and Demand for Nursing Home. The subtitles of Educational problems are Failure in School, Disharmony to School, Demand for Benefiting from the Educational Services of the Center, Maternity-infant Training, Training for Right of Human rights of Women, Adolescent-Mother Training, Program for the Support of Early Childhood and Literacy Course. Sub-titles of economical problems are Demand for In-kind and In-cash Aid, Unemployment Problem and Demand for Employment, Vocational Course and Provision of Employment, Fee for Person in Need of Nursing and Handicapped people, Demand for Clothing Support. Sub-titles of Demands towards Social Cultural Activity are Skills Course, Benefit from Social and Cultural Activities, Summer School for Children, Child Care and Training Program, Support Program for Fathers and My family Training Program.

RESULTS

Following the analysis of the data, services were evaluated according to variables such as gender, marital status, level of education and development period. In this way, the data of the first five years were evaluated collectively and data about the following years were presented separately as follows:

According to analysis of service demand between the years of 2000 and 2005, 75% of the people who applied for domestic problems 75% were females (n=15) and 25% were males (5). 26.1% (n=390) of people who applied for heath problems were females and 73.9% (n=1102) were males. 61.1% (n=35) of people who applied for educational problems were females and 38.9% (n=35) were males. 42.1% (n=496) of the people who applied for economic problems were females and 57.9% (n=681) were males. 86.9% (n=1851) of the people who applied for social problems were females and 13.1% (n=278) were males. According to the marital status variable, 40% (n=8) of people who applied for domestic problems were married and 60% (n=12) were bachelor. 42.1% (n=630) of the people who applied for health problems were married and 57.9% (n=863) were bachelor. 33.3% (n=30) of the people who applied for educational problems were married and 66.7% (n=60) were bachelor. 70.7% (n=481) of the people who applied for economic problems were married and 29.3% (n=200) were bachelor. 37.2% (n=538) of the people who applied for social problems were married and 62.8% (n=910) were bachelor.

Of the people who applied for YTM in 2006, 43.5% were females and 56.5% were males. Males applied mostly for health service. Females respectively applied

for economic, social and educational services. Bachelor people respectively demanded for health problems, social and cultural activities, education. Married ones respectively applied for health, social and economic support.

Of the people who applied for YTM in 2007, 43.7% were females and 56.3% were males. Males applied mostly for health service, economic support. Females respectively applied for economic, health and educational services. Married people respectively demanded for health and economic problems. Bachelor people respectively applied for economic and health support.

TABLE 1. THE DISTRIBUTION OF PEOPLE WHO RECEIVED SERVICE FROM YTM IN 2008 ACCORDING TO MARITAL STATUS AND GENDER

	Domestic		Health		Educational		Economic		Social		Total			
	F	M	F	M	F	M	F	M	F	M	N f	%f	Nm	%m
Bachelor	3	2	150	269	130	97	346	329	36	35	665	47.6	732	52.4
Married	2	1	236	208	78	-	80	95	117	16	513	61.5	320	38.5
Total	5	3	386	477	208	97	426	424	153	51	1178	52.8	1052	47.2

According to Table, 62.2% of total of 2230 people who applied to YTM in 2008, were bachelor and 37.8% were married. Bachelor people respectively applied for economic, health and social support. Married people respectively demanded for health, social, economic and educational problems. Males applied mostly for health service, economic, educational and social support. Females respectively applied for economic, health, educational and social support. In both gender and marital status, the level of support for familial problems was very low.

According to education level of people who received service between 2000–2005, 18.3% were illiterate, 5.3% were literate, 30.6% were graduates of five years compulsory primary education, 9.3% were graduates of eight years compulsory primary education, 14.6% were graduated from high school, 2.4% were graduated from higher education and 19.5% were still students in a educational level. A total of 3738 people received service.

According to education level of people who received service in 2006, 24.5% (n=338) were illiterate, 3% (n=42) were literate, 30%(n=413) were graduates of five years compulsory primary education, 8% (1119) were graduates of eight years compulsory primary education, 13% (174) were graduated from high school, 2.5% (n=36) were graduated from higher education and 19% (n=264) were still students in a educational level. Graduates of five years compulsory education (n=413) received services with the highest level (30%). Demand for health services is high in all educational levels but students need more social support than the other groups.

According to education level of people who received service in 2007, 41.3% (n=852) were illiterate, 2.6% (n=53) were literate, 21.5%(n=443) were graduates of

five years compulsory primary education, 4.9% (102) were graduates of eight years compulsory primary education, 8.7% (181) were graduated from high school, 2.4% (n=49) were graduated from higher education and 18.6% (n=383) were still students in a educational level. During that year, illiterate (n=852) people received most service and economic and health services were the most demanded ones for all groups.

TABLE 2. SERVICE RECEPTION OF PEOPLE WHO APPLIED TO THE CENTER IN 2008 ACCORDING TO LEVEL OF EDUCATION

	Domes-tic	Health	Educa.	Eco-nomic	Social	n_{total}	$\%_{total}$
İlliterate	5	316	178	728	71	1298	58.2
Literate	_	20	1	14	3	38	1.7
Primary I*	2	307	20	65	55	449	20.1
Primary II**	1	64	4	23	17	109	4.9
Secondary	_	94	6	13	51	164	7.4
High school	_	22	2	3	3	30	1.3
Student	_	40	94	4	4	142	6.4
Total	8	863	305	850	204	2230	100

*Only five years ** five years +three years=8 years

According to education level of people who received service in 2008, 58.2% (n=1298) were illiterate, 1.7% (n=38) were literate, 20.1%(n=449) were graduates of five years compulsory primary education, 84.9% (109) were graduates of eight years compulsory primary education, 7.4% (164) were graduated from high school, 1.3% (n=30) were graduated from higher education and 6.4% (n=142) were still students in a educational level. During that year, illiterate (n=1298) people received most service (58.2%). health and economic services were the most demanded ones for all groups.

According to development period of people who applied to the center in 2006, 4% (n=56) were in preschool age, 14.7% (n=203) were in school age, 11.3% (n=156) were in adolescence period, 70% (n=963) were in youth and adulthood period. Respectively the youth and adults, school age children and adolescents benefited from the services. While youth and adult respectively benefited from heath, economic and social support, school age children and adolescents respectively benefited from health, social and educational services.

According to development period of people who applied to the center in 2007, 9.9% (n=205) were in preschool age, 19.1% (n=393) were in school age, 14.7% (n=304) were in adolescence period, 56.3% (n=1161) were in youth and adulthood period. Mostly the youth and adults (n=1161) received service from YTM (56.3%). This can be associated with the functionality of cards for handicapped people in

the youth and adulthood. In that year, people mostly applied for economic support (in preschool n=118, in school age, n=175, in adolescence period n=143). People mostly applied for health problems in youth and adulthood (n=598)

TABLE 3. SERVICE RECEPTION OF PEOPLE WHO APPLIED TO THE CENTER IN 2008 ACCORDING TO DEVELOPMENT PERIOD

	Domestic	Health	Educa.	Economic	Social	n_{total}	$\%_{total}$
Childhood	_	32		119	39	317	14.2
School children	_	48	83	120	9	260	11.6
Adolescent	_	81	13	98	9	201	9.1
Yought and Adult	8	702	82	513	147	1452	65.1
Total	8	863	305	850	204	2230	100.0

According to development period of people who applied to the center in 2008, 14.2% (n=317) were in preschool age, 11.6% (n=260) were in school age, 9.1% (n=201) were in adolescence period, 65.1% (n=1452) were in youth and adulthood period. Mostly the youth and adults (n=1452) received service from YTM (65.1%). In that year, people mostly applied for health and economic support

DISCUSSION

According to the analysis of the findings, services for family are conducted as free care provision by the center. Trainings for the development domestic relations increased every year but rehabilitation studies about the problems of the families could not be improved over years. Especially women who have a low level of education benefit from this service. This indicates that center reached to its target group. In the first years of the center, effective training programs for the educational problems of the people could not be provided however there are improvements in this field with enhancing physical facilities (building, personnel). Women, school age children and preschool children mostly benefited from the educational services. Cooperation with university and non governmental organization raised the volume and the quality of the service. Furthermore, the increase in the ratio of women who received training indicates that immigrating people have a low level of education (Kurt, 2006). This result point out that center reached to women who have priority in service reception. Furthermore, the preschool education is focused on and services for this group have been significantly increased. In the following years, illiterate people have demanded service with increasing percentages. Other studies indicate that people immigrating from Southeastern Anatolia Region have a low level of education and they can

use facilities of the city and integrate with the city in the long run (Barut, 2002; Gözlügöl, 2006; Gürbüz, 2006).

Service demand for health problems and services for this demand increased in time. The primary reason is the provision of "white card" and "handicap card" which enables people to use heath service freely. According to the study of Barut (2002), the main reasons of immigration are economic and educational inadequacies and absence of health insurance.

The center has provided economic support on a large scale since the foundation of it. Demand for this service increases every year. This indicates that the poverty of those people continues. Being unqualified and unemployed are the main treasons for the economic insufficiency of the people. Other studies indicate that the main problems of immigrating people are economic insufficiency and the absence of health insurance. (Barut, 2002; Gözlügöl, 2006; Gürbüz, 2006).

Especially women and adolescents applied for social and cultural activities. Barut (2002) indicated that nearly all of the people (98.3%) who immigrated to Istanbul had problems about environmental disharmony, linguistic and cultural differences and the other people's approach for perceiving them as potentially guilty. Support for social and cultural problems will assist people for getting acquainted with the city and accommodating with the city.

CONCLUSION

In the light of the all findings, economic, health, social and educational problems of the local community continue with same intensity. Cultural and social activities are essential for the integration of people with the city. Centers for the family consulting functions for the benefit of individual and family and their activities should be sustainable. Especially services for children and adolescents should increasingly continue since they play a preventive role for the problems of childhood and adolescence. Following recommendations can be made for the better functionality of centers for family consulting: Increasing the physical capacity of centers for family consulting, Employment of personnel who will provide effective operation in service fields, Increasing basic and vocational training services which will provide economic development among people especially women, Employment of professional personnel such as psychologist, psychological counselor, family counselor, social service expert in order to solve domestic problems, Enlargement of family trainings in the center, Enhancing cooperation with non governmental organizations and universities in order to contribute the activities of the center, Adoption of preventive services by increasing the functions of the center for family consulting rather than care of the center model, Opening new centers for family consulting in metropolis whose population and social structure are changing every day.

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DEVELOPING REHABILITATION PROGRAMS FOR PEOPLE SHOWING SCHIZOPHRENIA SYMPTOMS

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Abstract. *Schizophrenia can be described as a progressive neurodegenerative disease which is chracterised with profound cognitive malfunctionings. Recent data indicate that cognitive problems like emotional and working memory problems that are observed in schizophrenia patients might not be a consequence of the illness but might rather be the reason of the observed problems-negative symptoms, in whole, defined as schizophrenia. These endotypic problems in cognitive abilities can be observed in both schizophrenia patients before the onset of the illness and in their close relatives as well. Such findings raise the fact that schizophrenia should be taken as a serious genetic-based chronic illness like cancer etc in sense of developing health psychology policies and special pre-emptive rehabilitation procedures can and should be prepared for indiviuals in school and work settings who are high on risk. In this paper possible ways for such kind of pre-emptive rehabilitation for schizophrenia patients will be focused on.*

Keywords: Schizophrenia, rehabilitation, negative symptoms, cognition

INTRODUCTION

Schizophrenia is a progressive, and probably late onset neurodegenerative disease. Various cognitive functions including working memory, episodic memory and attention processes are widely disturbed in schizophrenia. Problems in working memory are especially obvious in schizophrenic patients. Whereas working memory is a process that has been operationally defined in various ways it can readily be refered as a 'limited capacity system that is capable of storing and manipulating information and that is assumed to be an integral part of the. memory

system' in terms of Baddely. In common, the working memory process is assessed by using tasks in which a delay is interposed between sample presentation and the production of a response based upon a maintained representation of the sample. It is assumed that accurate performance of so-called delayed response tasks requires intact capability to store, maintain and (in some cases) manipulate information about sample presentations in the 'working memory buffer' until a response is required and that impaired performance of these tasks reflects deficits of working memory .

COGNITIVE DISFUNCTIONS IN SCHIZOPHRENIA

Patients with schizophrenia exhibit impaired performance of tasks that require the maintenance of information across short periods of time to guide performance. Additionally, schizophrenia patients are impaired on an 'N'-back task that indicates compromised capacity of the working memory system: they have difficulty maintaining greater but not smaller numbers of items in working memory. Goldman-Rakic has theorized that most of the neurocognitive impairments found in schizophrenia can be explained in terms of a fundamental defect in the ability to maintain information 'on-line' to guide behavior. For example, deficits of Wisconsin Card Sort performance can be thought of as an impairment of the ability to maintain valid set rules in mind to guide sorting performance. In this way, an impairment of working memory has been proposed as the operational core of the neurocognitive dysfunction in schizophrenia.

The encoding, storage and retrieval of relatively large amounts of information across the order of minutes is termed short-term or 'secondary' episodic memory, to be distinguished from working memory or remote memory. In human subjects, these processes are conventionally studied by presenting subjects with lists of words or visual items and having them recall as many items as possible, usually minutes later. Short-term episodic memory is dissected from working memory by either: (1) the implementation of intermediate length delays (5–30 min) that exceed the resistance to delay of the working memory system; or (2) by the use of a large number of list items that exceeds the capacity of the working memory system. Patients with schizophrenia have substantial difficulties with short-term memory, both in terms of encoding and retrieval, and the neuronal dysfunction that underlies these impairments is distinct from those that lead to working memory deficits. The retrieval of information from short-term episodic memory recruits different brain structures depending upon the nature of the information to be recalled and whether simple recognition or conscious recollection are required . Dysfunction of the mesiotemporal cortex, and resulting impairments of retrieval of episodic information, appear to be additional factors of the cognitive deficits in schizophrenia.

Schizophrenia patients exhibit robust and profound performance impairments when tested on tasks that tax volitional aspects of sustained and divided attention. These impairments are likely due to deficits in the ability to sustain, divide and shift attention, indicating impairments in both vigilance and executive control over attention. Interest in the attention deficit in schizophrenia is reinforced by the idea that this particular neurocognitive deficit is likely an important endophenotype.Disordered attention in schizophrenia has been associated with specific biological alterations. Schizophrenia patients show abnormalities in the electrodermal potentials associated with attentional performance, and impairments of attention are associated with alterations of frontal lobe metabolism. The evidence therefore suggests that the contribution of frontal cortical mechanisms to the accurate detection of stimuli in continuous performance tasks may be relevant to the pathophysiology of schizophrenia.

Whereas cognitive deficits observed in schizophrenia patients shortly discussed above are known to be among "characteristic" features, even "sine qua non", of schizophrenia since as early as 1913's, recent data indicate that these cognitive deficits can probably be considered as "trait-markers" as these deficits can also be observed in relatives of schizophrenia patients who are not diagnosed as schizophrenic. When, in addition, considered with the fact that schizophrenia patients seem to suffer from these cognitive deficits long ago from diagnosis it can readily be talked about endotypic cognitive problems in schizophrenia.

REHABILITATION APPROACHES IN SCHIZOPHRENIA

Until about a decade ago, the topic of cognitive remediation in schizophrenia received little attention, despite the fact that it has been firmly established that cognitive deficits persist after the psychosis subsides. Indeed, it has recently become clear that the cognitive deficits restrict the possibilities for functional recovery, possibly even more so than the symptoms of psychosis do (Green 1996). Antipsychotic medication made it possible to reduce psychotic symptoms and to prevent relapse, but patients continued to suffer from poor daily functioning.

These clinically oriented cognitive rehabilitation programs have been inspired by different theoretical perspectives. A fundamental distinction in rehabilitation of brain damage is that between restitution and compensation (Robertson and Murre 1999; Park and Ingles 2001). In the compensation approach, individuals learn strategies to do things in a different way; restitution means that they learn to do what they did before in more or less similar ways as before. Compensation takes places when someone uses a quite distinct set of europsychological processes to produce certain behavior compared with a healthy individual. Simply stated, restitution uses repeated exercises of a particular deficient cognitive function, and compensation provides the patient with alternative strategies for achieving goals, for example the teaching of

certain thinking skills to solve everyday tasks or teaching explicitly certain strategies that are applied automatically and unconsciously in healthy individuals. An example to the "rehearsal learning approach" is the study by Benedict et al. (1994), in which subjects received roughly 15 hours of repeated practice with computer-mediated vigilance tasks. Wykes et al. (1999) used the cognitive intervention developed by Delahunty and Morice (1993), which is an example of the compensation approach. This program provides subjects with a discussion of information-processing strategies and means to organize behavior before practicing the tasks at hand.

A third dominant paradigm in cognitive rehabilitation is the learning theory. This approach uses behavioral learning principles such as reinforcement and shaping to improve performance. Behavioral techniques may be particularly suited for patients with severe mental illness. These patients may not benefit from the other approaches to cognitive rehabilitation, because they lack adequate attention to attend to the material being presented (Silverstein et al. 2001).The results of the meta-analysis studies show that cognitive rehabilitation can improve task performance in patients with schizophrenia. The effects were apparent on tasks outside those used in the training procedure, providing evidence for at least limited generalization of training effects. Results of training programs that provided strategies for doing the task at hand were slightly better compared to programs that consisted of rehearsal learning, Thus it seems to be more useful for schizophrenia patients to learn to compensate for their deficits by using strategies, than to do cognitive exercises without further instructions received some tentative support.

CONCLUSIONS

Whereas mainstream cognitive rehabilitation programs slightly discussed above aim to provide aids for "already diagnosed" schizophrenia patients to cope with their cognitive disfunctionalities, these cognitive disturbances seem to be exist long before being diagnosed as a schizophrenia patient. Given the results of genetic studies and success ratio observed in patients joined to rehabilitation programs, "sine qua non" cognitive deficiencies (problems in spatial working memory for instance) in these patients and in their close relatives are obvious throughout their lives whether they are diagnosed as a schizophrenic or not. Thus, it is possible that rehabilitation programs that are in use for already diagnosed schizophrenics might also be applied to individulas who are in high risk group or show cognitive disturbances in particular cognitive abilities that are described above. A sort of "check list for cognitive disturbances" can be prepared and be applied by guidance and counciling services in schools as to detect individuals that are high on risk for developing schizophrenia before the illness actually reveals itself. Such kind of a general rehabilitation program may help us in developing means in terms of pre-emptive mental health care.

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PARENT'S PERCEPTION OF THE INTEGRATION OF THEIR CHILDREN WITH EPILEPSY IN THE MAINSTREAM SCHOOL SYSTEM IN BULGARIA

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Abstract. *Integration of children in the mainstream educational system in Bulgaria has become guaranteed by social policy regulations after the country's accession to the European Union. Before this, governed by the medical model, children with disabilities were often educated in "special" schools. Association of parents with children with epilepsy, whose mission is inclusion of people with epilepsy in the society, has conducted a study that investigates the parents' of children with epilepsy perception of the process of integrating their children in the mainstream educational system. Participants in the study, members of the Association were asked to provide data on their: 1) knowledge about and acceptance of the illness; 2) perception of the school conditions for integrated education; 3) perception of their child's ability to cope with school tasks; 4) perception of positive attitudes towards the child at school. The results show that there is a relationship between the social status of the parents (marital, employment, health), age and place of living and their perception regarding the integration of their children at school. Recommendations for professionals working with families with children with epilepsy are suggested.*

Keywords: epilepsy, school integration, perception, parents, NGO

INTRODUCTION

The Association of Parents with Children with Epilepsy was set up in the 1995 – 6 years after the fall of the Berlin wall and the beginning of the democratic changes in Bulgaria. It was started by a group of parents of children with epilepsy who experienced problems of exclusion and stigmatization when attempting to integrate their children in the mainstream educational system – at schools and kindergartens.

The setting up of the organization was consistent with the new democratic values of people's participation in the community. Nevertheless, this agenda was in conflict with the prevailing expectations people had towards the state as the major source of service provision and support – the attitudes that were created during the communist years. (Bilson& Markova, 2007). The development of these attitudes were shaped by social policy encouraging reliance over the state and by the development of comprehensive system of institutions for long-term care where people with different types of problems – health and psycho-social were isolated from the rest of the society.

In Bulgaria during the communist years (1945–1989) the number of institutions built only for children has risen from 40 (before the communist time) to 268 in 1989. This increase was consistent with the ideology of the communist state (i.e., making social problems invisible while, at the same time, strongly intruding on the private lives of individuals and families). Additionally, as Creuziger (1995) pointed out, the official Soviet policy from 1918 until the 1930s viewed the family as an institution that was supposed to die out (p. xxii) due to the fact that women, having to become workers, would eventually lose their traditional child-rearing function. Thus, children would become the concern of the larger society, and children's institutions would be created (p. xxii).

This policy encouraged people to have certain expectations about the state and its responsibilities in the childcare domain. Sugareva (1996) explains this attitude by pointing out that legislation in socialist countries "encouraged" childbirth by providing benefits to parents. Studies show that the public still maintains the view that the State is obligated to help the parents in the child rearing process (p. 34).

In this post-communist context the Association's promoting and relying on the empowerment and activism of its members inevitably met the existing and deeply embedded attitudes of passivity and doubt. Nevertheless, the membership of the Association is growing throughout the years and now it comprises of over 1000 members in 17 branches in the country. The organization's activities are targeted at social policy changes by advocacy and lobbying, at by providing psycho-social interventions for integrating children at the mainstream schools and supporting parents.

The presented research focuses on the integration of the children in the school system as it is a long process in which the participation of the parents is essential in all its stages – assessing the child abilities and the school readiness, coping with the illness and its effects, lobbying for additional resources at school, supporting the child

in his/her managing the academic and the relational challenges at school. On the activity of the parent depends the result of the integration – the time a child spends in the school environment. Without the parent's persistent support of the child, the most common result is that the education takes place at the homes of the children.

METHODOLOGY

Goals of the study

The major goal of the study was to investigate how parents of children with epilepsy, members of the APCE, perceived integration of their children into the school system (primary and secondary schools). Additional goals were to find which socio-demographic factors have effect on their perception to the process of integration and, finally, to generate some additional hypotheses regarding parent's participation in this process.

Hypotheses

In view of the fact that the target group defined in previous paragraph are people with diverse socio-demographic background, a series of 25 hypotheses were formulated, concerning the expected effects of socio-demographic characteristics (age, education, place of living, employment and marital status) on parents' perception of 5 areas of school life, which are related to the integration of their children.

Participants

Members of APCE were invited to express their opinion on these areas through the local branches of the Association. A questionnaire was sent to the branches' members and in return, the researchers received about 200 of which 186 were filled in properly. Thus, the sample size was 186 parents of children with epilepsy, mostly mothers, and it could be considered as random. The participants are probably involved in the association's activities.

Respondents lived in 13 towns and villages around the country. Among them about 8.06% were inhabitants of Sofia, the capital of the country; 41.94% resided in middle sized towns (50 – 100 000 inhabitants), centers of districts; 27.42% lived in small towns, and the rest 17.74% – in villages.

The respondents' age ranged from below 20 to above 60 – 20.97% of all participants were below 20, 30.64% – from 21 to 30, and 33.87% are from 31 to 40.

The majority of the parents (69.36%) had graduated from high school (providing general or professional education); 11.29% were those with primary and secondary and 16.12% – with higher education.

The most important demographic characteristics of the parents the research team considered the employment and family status as it had direct implication for

their resources to take care of their children. The data on parents' employment status showed that only half of the participants had stable income necessary to provide for the medical treatment of the children – the employed parents (27.42%) and the retired (25.81%) even though the latter received pensions enough to cover their own basic needs. The most disturbing finding was that about 40.32% of all parents had declared themselves as unemployed. The last group of participants were those without their own incomes – students in higher schools, who were 1.61% of all.

The marital status of the respondents was also a matter of considerable concern. Fifty three percent of the participants were either single (33.87%) or divorced (19.35%). The rest were married (41.94%).

Instrument

A questionnaire was designed to collect demographic data and data on several areas, related to school integration of the children with epilepsy. The 58 items were formulated as positive and negative statements grouped in the following 5 subscales representing the areas of interest:

- Parents' knowledge and acceptance of epilepsy. This subscale consisted of 12 items exploring parents' opinions on the extent they had knowledge about the illness (symptoms, treatment, its effect on the psychological development of their child) and their readiness to inform that the child had epilepsy at school.
- Parents' perception of the conditions for integrated education. This subscale consisted of 12 items focusing on educational policy on integration and its implementation in practice.
- Parents' perception of the children's behaviour and success at school. This subscale consisted of 9 items exploring parent's views on their children' ability to cope with school tasks.
- Parent's perception of the (positive) attitudes at school towards their children. This subscale consisted of 18 items, asking about how parents view the feelings and behaviour of classmates, teachers and school authorities towards the children with epilepsy.
- Parent's perception on the adequacy of the medical care at school. The subscale consisted of 7 items, studying parent's perceptions on the capability of school authorities, teachers and medical staff to provide qualified help in cases of emergency.

A 5-point Likert-type scale was used labeling the range of "strongly disagree" to "strongly agree". The positive statements were weighted from 5 to 1 (i.e. from strongly agree to strongly disagree), and the negative ones had these weights in reverse order. The subscale scores of each respondent were calculated as sum of the scores on each item.

Design of the experiments

Between group design was used. The independent variables were the participant's demographic characteristics : age (5 groups), education (5 groups), place of living (4 groups), employment (4 groups), and marital status (3 groups). The dependent variables were parents' perception of the areas related to school integration of their children, namely the 5 subscales of the questionnaire.

One-way unidimensional ANOVA was used for data analysis. The study examined the effect of each demographic factor on each one of the aspects of parents' perception (5 independent vars X 5 dependent vars), hence 25 test were conducted. Statistical significance of the results was set to p=0.05.

RESULTS

Below major statistical results are reported.

Parents' knowledge and acceptance of the illness

As a whole, the parents described themselves as well-informed about the illness, especially about its origin and lack of relation with mental illness. They believed, that it was of interest of the child and society that the illness was announced. The age of the parents had significant effect on this variable ($F_{(4, 178)}= 3.42$, p=0.01). The younger parents (up to 30) perceived themselves as more informed than the older ones. Parents with higher education ($F_{(4, 175)}=7.66$, p=0.00) and married ones ($F_{(2, 174)}=6.79$, p=0.00) tended to view themselves as having more specialized knowledge on the illness in comparison with the other groups.
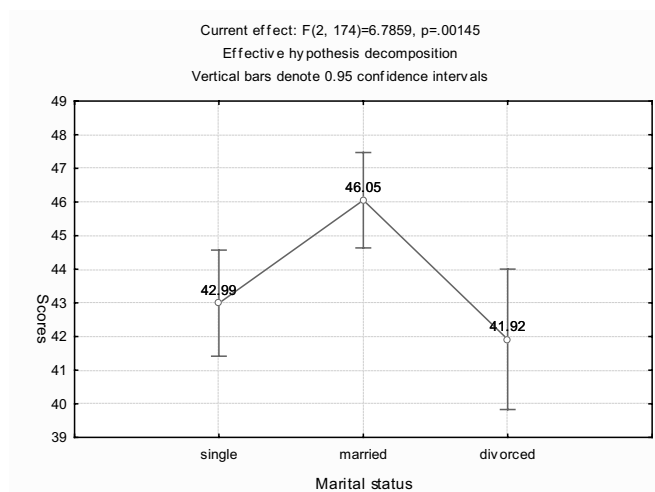
FIGURE 1. THE EFFECT OF MARITAL STATUS ON PARENTS'
KNOWLEDGE AND ACCEPTANCE OF THE ILLNESS

Parents' perception of the conditions for integrated education

Participants agreed that integrated education was the most appropriate for their children but they saw the conditions for integrated education as well as the legal frame not satisfactory. In their opinions, the school forced the children with epilepsy to adjust to the system rather than trying to adapt it to their needs.
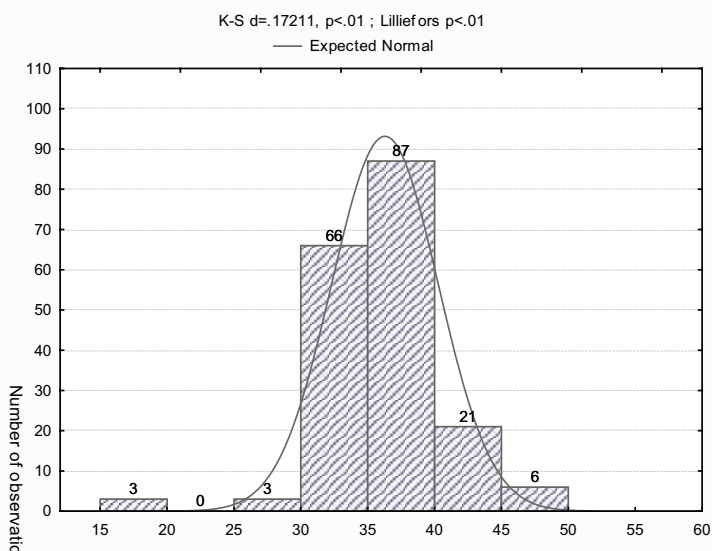
FIGURE 2. PERCEPTION OF THE CONDITIONS – DISTRIBUTION OF SCORES

More critical of the system were the younger $(F (4, 178)=2.76, p=0.03)$, the unemployed and the retired parents $(F (3, 173)=4.37, p=0.01)$. More educated people hold more positive opinion about the potentials of integrated education. Family status had no effect on this variable.

Parents' perception of the children's behaviour and success at school

Surprisingly, the parents' opinions of children's abilities to cope with their school responsibilities were rather negative. They believed that their children had problems with learning about school subjects, had poor memory and suffered from lack of concentration. They often saw them as nervous and aggressive.

Interestingly, only employment and family status had significant effects on this variable. Unemployed and retired parents $(F (3, 173)=10.18, p=0.00)$ and single and divorced parents $(F (2, 174)=8.72, p=0.00)$ perceived their children as less able to cope at school.
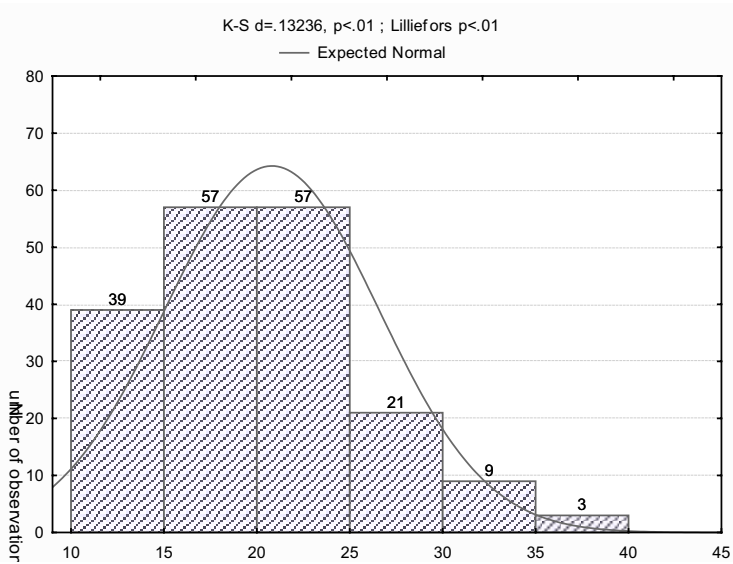
FIGURE 3. PERCEPTION OF THE CHILDREN'S BEHAVIOUR AND SUCCESS − DISTRIBUTION OF SCORES
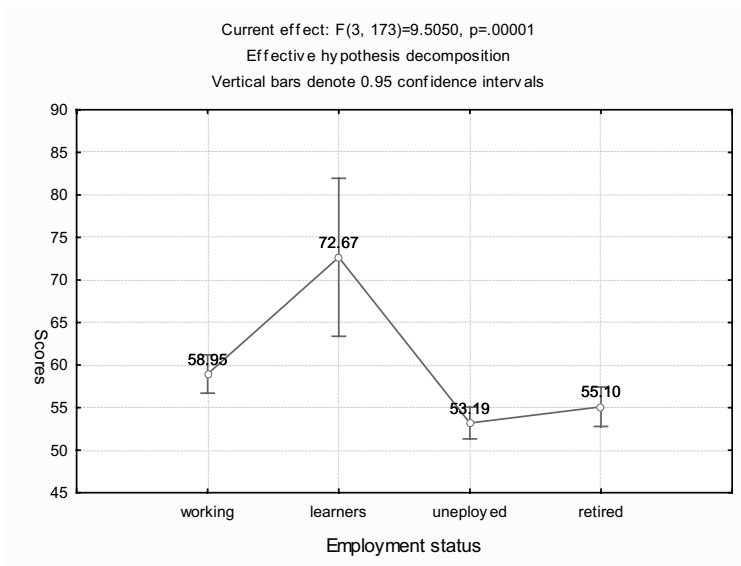
FIGURE 4. THE EFFECT OF EMPLOYMENT STATUS ON PARENT'S PERCEPTION OF ATTITUDES OF THE SCHOOL ENVIRONMENT

Parent's perception of (positive) attitudes of the school environment towards their children

The general opinion of the respondents was moderate. The parents definitely considered the family, not the school, as the mainstay of their children's life. They blamed the teachers for lacking skills and motivation to work towards integration of the children with epilepsy and saw them as favoring the healthy children.

Data showed that parents who were younger ($F_{(4, 178)}=5.16$, $p=0.00$), lived in small places ($F_{(3, 173)}=9.57$, $p=0.00$), who were unemployed or retired ($F_{(3, 173)}=9.51$, $p=0.00$), and single and divorced ($F_{(2, 174)}=8.50$, $p=0.00$), perceived the attitudes of the key school figures as less encouraging integration.

Adequacy of medical care at school

In general the parents were not inclined to entrust their children to the care of school medical or teaching staff. Their anxiety related to potential seizures. They perceived the school staff as incompetent to cope with such condition. Additionally, the parents were reluctant to rely on the teachers helping their children in taking their medicine at school. Here, the educational level of the respondents ($F_{(4, 175)}=7.27$, $p=0.00$) and their place of living ($F_{(3, 173)}=7.24$, $p=0.00$) had significant effect although showing no clear pattern. The married parents evaluated the medical care better then the single/divorced ones ($F_{(2, 174)}=8.76$, $p=0.00$).

DISCUSSION

The analysis of the data showed significant results in 18 (72%) of the 25 experiments. A conclusion could be reached that there was no shared opinion among the parents, members of APCE regarding their children's integration at school. Their perceptions of the children's integration were strongly influenced by their demographic features.

The analysis of the findings suggested that parents involved in the study tended to be people whose demographic characteristics indicated that they themselves were potential targets of stigmatization and marginalization. For example, half of the participants were single which is still regarded as a negative characteristic in the Bulgarian patriarchal society. Half of the participants had restricted resources as unemployed. The study showed that the potentially most marginalized parents tended to see the situation around their children's integration at school more negative. The most disturbing finding was that these parents tended to see their children's abilities to cope at school in a more negative perspective.

The study indicated that for a child with epilepsy family is the major source of support. In the single-parenting household where a parent potentially needs support himself/herself, the illness poses additional strain which is a big challenge before parent's active participation in the process of his/her child's integration.

Depression is a possible explanation of the negative perspective on the abilities of the child to cope at school.

CONCLUSIONS

In the Bulgarian post-communist society the context sets some limitations before people's community participation when disability is involved. First, there exist attitudes that the state is obliged to provide total support in cases of disability. Second, child protection legislation guaranteeing integration of children with disability at school is still new and not well integrated in the everyday practice; third, helping professionals have not developed skills for empowering people to participate in the community protecting the rights for their children. This study showed that the members of the Association of parents with children with epilepsy who participated in the research were people in need of resources–126 (68%) of the total 186 are unemployed/ retired/pensioners, 99 (53%) of the participants are single and divorced. The more stigmatized the parents are, the more negatively they perceive the conditions for integration of children and their children's abilities to cope with the school requirements.

To encourage the parent's participation in their children's integration at school, the professionals have to address the risks of marginalization of both – children and parents. The Association of parents with children with epilepsy is in a good position to provide casework as a method intervening in the entire system around the child – the school and the family (Томов, Markova, Chincheva, 2007). It can address individually the needs of the parents. This will facilitate their involvement in the integration of their children at school and in the development of the organization itself.

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SYMBOLS IN PSYCHOTHERAPY

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Abstract. *Investigation of many of the classic and some of the modern psycho-therapies is long and hard, filled with difficulties process. One of the most stable bases upon which every psychotherapeutical investigation may set its beginning is the understanding of the secret language of symbols making its manifestations in psychotherapeutical interaction. Understanding the secret language of symbols may help to be found the origin of human's innermost desires, fears and ambitions, which are leading people to their meaning of life. Many times the contents of human unconscious and many people's behaviors are too dark and difficult to understand, and the only way to lighten it is by using symbols which are making human conscious much more clear.Different points of view and different understandings of symbols and their influence on human behavior are expressed in the different psychotherapeutical studies. The main purpose of our work is to present and describe the main points of view for symbols and processes of symbolization in psychotherapy, and to try to classify them in a common system, so to come a little closer of understanding of their secret language as in psychotherapy, as well as in our everyday life. We will try to do this by describing some of the deepest bases of the main psychotherapeutical studies and by studying them to find the secret foundations of symbols and processes of symbolization and by these to try to find an explanation for some manifestations of humans' everyday symbolic behavior.*

Keywords: *Symbol, Symbolization, Psychoanalysis, Analytical Psychotherapy, Cognitive-Behavioral Psychotherapy, Inter-cultural understandings, Psychodrama, Typification of Symbols*

INTRODUCTION

Studying the category ***symbol*** and the ***processes of symbolization*** as an individual and unique act of the consciousness is very important not only for their deeper understanding, but also for the explanation of many factors and manifestations of

human behavior. Due to its various functions, symbol plays an important role in human's thinking and imagination, and its usage in everyday life grows more and more increasingly. So, we may say that symbols are staying in the middle of most of human actions and practices, because they are a kind of secret key to human unconscious and are opening our conscious for new and unknown places.

Every day in our life – in language, in different gestures, in our dreams, whether we consider or don't consider this, we always use symbols. They are the manifested codes of our forbidden deep inner desires, which are pushing us to express them and are shaping our everyday life. In many situations they are the ones on which depends the success or failure of our activities. So, by understanding the secret language of symbols we use so often, we may understand the essence of our real desires, dreams and fears, ambitions and passions, and by them – the real sense of life for us.

With this investigation, using the ***methods of analysis and synthesis***, we are trying to find the deep sense of symbol forming as a human practice. Symbol examination includes studying the processes of human behavior, their deep explanation with the processes of human motivation.

In this work, we are trying to make a kind of psychological portrait of symbol by studying its explanation from the point of view of different psychological theories and paradigms. We study the ***processes of human symbolization*** like they have been understood ***in the basic psychotherapies*** – psychoanalysis, analytic psychology of archetypes, cognitive and behavioral psychology and psychotherapy, and psychodrama as a representative of group therapy. In all these therapies ***symbol obtains different names***, which taken together come to better understanding of symbols and its practical implementation. In some theories symbol is called "instinct", dream or ritual action, in other – myth Super Ego, monument of culture or creative message, in other – just action or something else, but although all these faces of symbol it always keeps its indivisible integral structure.

Etymology of word Symbol

The etymology of word symbol comes from greek word "***symbolon***" which means sign, mark, indication, call etc. There is another word in greek language with common sense with the first one – "***symballo***", which means combine, compare, meet, conclude, agree etc. The origin of the two words shows that the base of the word symbol is a kind of meeting of consciousness with some of the objects of this consciousness.

The basic psychological understanding of symbols is related with the understanding that the producing and using of symbols is possible only for human beings. So, psychology says that ***symbol*** is an object or an event, which is used to present another object or event, but the main sense of symbol, is created by the person, who is using it. The relation between symbols and their creator is not made

biologically in advance, and it is not obligatory that symbol and the symbolized object or event must have some kind or other physical similarity. The explanation for the relations between symbol and the symbolized can be found in person's, who is making the relation, history of environment. Every kind of symbol can be used to signify every kind of object or event. Once when the meanings of symbols get more popular confirmation, they seem for the ones who use them so natural, like they have been using them forever, as the meaning of different signs. Because the fact that the meaning of symbol is an object of a kind of social convention or consensus, but not sign with natural meaning, meaning of symbol can be changed too easy, even during the life of people who use them. Because of these, people found that by using symbols they can deliver through each other too confused, delicate and precisian messages.

The concept of symbol in psychology, which seems easy for translation in different everyday life languages, is one of the most unclear, muddled and conflicting words, because whether *symbol is as ancient as the human being*, is scientific conceptualization is a comparatively later product of people's cultural development.

Psychoanalytic understanding of Symbols

The point of beginning for psychological investigation of the category symbol we may find in the works of Sigmund Freud. His revolutionary foundation – psychoanalysis lays on the understanding that behind different human behaviors, often explained like *symbolic actions*, are hidden different, difficult to realize facts. Their investigation helps the understanding of meaning of symbols and their unconscious processes and their dynamic relations with human consciousness. A big part of these unconscious facts are formed in people's earliest childhood and later in the adolescent are used like models for dealing with different tasks. Such models give to people exact expectations for behavior of people around them and often define their whole perception and experience in different situations. Due to psychoanalysis, human psyche is made to use such models which in ordinary situations are changed by the consciousness and the person's realistic estimation of the possibilities of the concrete situation. Though under the pressure of deep stress or some traumatic events, the psyche is disposed immediately to actualize these unconscious models, which are not considered with the conscious and rational processes of thinking – for example infantile models for satisfying some needs, unrealistic beliefs and convictions, denial for accepting the surrounding reality etc.

According to psychoanalysis, the communication in psychoanalytic process posses some meanings behind the purposive, explicable, direct and conscious and accept the idea that the psychic processes are forming different *symbolic elements* which are manifested in human's behavior, in some symptoms, in thoughts

and emotions, and these articulations are carrying some meaning which may be understand in very different senses. Besides all these, symbols are a kind of reflection of person's deepest inner representations for himself and for the others, in a way which is not always accessible for consciousness.

The orthodox psychoanalysis stays behind the idea that, if the sensory and mental sensations have to become conscious, must be related with words or verbal conceptions. The unconscious experience have to be reconstructed, so to **come to the level of language, which also is one of the most popular human's symbolic representations**, and through language to come to level of consciousness. The dynamic transfer – contra-transfer between patient and therapist shows that for understanding his patient he has to use his own conscious and unconscious as an additional support of the sensation, to make an effort to understand his own experiences and sensations with the patient, to dress them with the appropriate words and conceptions, even in front of his own himself.

Sigmund Freud's revolutional foundation exists in this that the unconsciousness sleeping, but it constantly makes various live relations with the other systems of the psyche. Unconscious every day sends its delegates in the face of *different symbols causes different effects*.

Symbolization, or the process of symbol creation for the purposes of unconscious expression, according to psychoanalysis, at the same time is also a mechanism of defense for the psyche. In such case the psychic interest is redirected from loaded with many conflicts primary object to another, free of conflicts object, by using symbolic replacement.

The field of application of revolutionary ideas of psychoanalysis grows broader in the last years, not only in the field of psychological explanation of many facts and phenomena of psyche, but also in other spheres of social and humanity sciences, and also in other fields in everyday life. The idea of the existing psychic processes, not directly accessible for human conscious perception, although their *secret symbolic manifestations showing our real emotions and experiences of life* are proved for first time from psychoanalysis. The different symbolic manifestations of defensive mechanisms, as a reaction of pain which push back the conscious contents and are looking for alternative decisions are also facts, described and scientifically defended for first time from psychoanalysis. The basic idea for bio-psycho-social and epigenetic understanding with accent on the early years of human development, hidden again behind different symbolic forms, as well as the development of Ego in the continuity of generations as products of body, psyche and society at the same time, and on the base of this the contemporary bio-psycho-social paradigm allows by symbolic investigation to be solved different intra-psychic, inter-personal and organizational conflicts.

Psychoanalysis continues with the development of its ideas through *Sigmund Freud's followers* but everyone of them put his won individual accent on symbolic investigation.

Jungian Analysis for Symbols

The analytic psychology and psychotherapy was founded by Carl Gustav Jung, who at first was interested from Freud's theories, ideas and achievements but later he found some conceptual differences in the understanding of human psyche and makes his own theory.

Jung's theory is based on the theological presumption about purpose full-ness of the organisms by which the process of transformations in individuations of person is spread out. Following Jung, this is happening by the inherited unique psychic potential of every human being, called Ego. He finds that Ego shows the meaning of balance and entireness, but together with this Jung goes far behind this by recognizing the inherited spiritual part of every person.

Jung's theory puts human psyche as deep rooted in evolution, as an arche-type image and predisposition in collective unconscious, which includes the whole evolution and comes before and contents the beginning conscious of the man-kind. Following this ideas, Ego as a holder of personal conscious is coming later in human development. With this basic ideas Jung differentiates from Freud's un-derstanding for human unconscious as a holder of the oppressed contents of the psyche. Jung finds the real practical center of every personal spirit as a creative source, called Ego, not as a personal conscious as it is in Freud's theory, but as a whole spiritual potential, lying in the base of every human being. Jung things that every person is unique with his own special dispositions and traits from one point of view, and from other side every man is universal, holding characteristics, same for all people, and at the same time biological – related and depended on his own natural predispositions, and finally transcendental – including his main charac-teristic – the spirituality.

Jung is fixed with the idea that the unconsciousness is coming from personal experience and far beyond it – to the foundations of collective unconsciousness, which is holding the relation with the spiritual origin of the whole human potential and at the same time a psychological heritage of human experience from the very beginning of pre-historical times.

The secret language, following Jung, are the ***symbolic images***. The symbolic model is applicable to such kind of things, which we know that never would be fully got known. Following this model, the understanding of dreams is related not with the idea as a product of censorship from consciousness, but as a func-tion of not knowing the pre-historical language. While at the level of personal unconsciousness dreams are using well-known people and places as sources of expression, but the reasons above personal experience are delivered by archetypi-cal images, which are consisting all these universal mythologies, symbolizing the evolution of human spirit.

The processes of symbol forming in the terms of analytical psychology and psychotherapy include the idea of balance and harmony, which is mainly in east-

ern philosophies. The main sense and meaning of symbol is visible in mythology, religions and folklore, giving people the feeling that they are experiencing one and the same problems with the other people. These feelings are making possible life in communities, giving strength, safety and protection, the feeling for blood relationship between all living organisms on earth. Understanding and accepting one of these points of view for symbols is based on the concrete cultural rules (east or west) of symbolizing people. Freudian point of view is more concrete and therefore probably more near to the western cultural understandings. Jungian understanding may be presented as a kind of bridge between people from more traditional cultures and western civilizations with conceptual, cause-and-effect and personal thinking, and perception of world – more far from sensuality. From other side, cultures like from Africa, Asia, some parts of Latin America are more based on emotions and pre-logical and mystic thinking. That is why applying of analytic psychology and psychotherapy which lays on the bases of archaic heritage of symbol is more appropriate for psychotherapy and examination of such societies.

In the 30's of 20 century many doctors, psychiatrists, social workers and psychologists begin to get interested in Jungian ideas, applied on their work with children. In Jung's theory of human psyche the main idea is for integral whole personality, consisted from body and spirit. In his work Jung investigates the creative road of symbols of the integral personality but not from his earliest childhood. Jung is much more interested in individuation at second half or in adolescent life. This is because of the fact that he is thinking that child's unconsciousness has no age or any limits. Some of authors find that these Jungian ideas are stopping children's Jungian analysis because don't accept the existing of child's personal psychic life.

Cognitive perspective for Symbol understanding

Cognitive psychology and psychotherapy, in difference with the upper considered theories for human unconscious, is studying symbols and their together work with human psyche, from the conscious point of view and the processes flowing in it. So symbol studying here comes to happen by examining images and signs and their functioning in human conscious psyche. For more clear understanding of way in which humans are symbolizing we offer a consecutively look on the different elements and phases of these processes. First, we examine the process of perception and the ways in which a man accepts the new information, then goes through casual signs which he often uses in his everyday life, and after that – transforming signs into symbols with special personal and emotional loading for each man, and finally application and usage of received symbols in everyday communication and language. This is the general frame, used from different streams conceptualizing the key problems of processes of perception of new information, or how the liv-

ing organisms accept – by processes of perception, how code – by processes of learning, keep – by processes of memory, how extract and interpret – due to the processes of their thoughts, so all these processes make them able by language and other kinds of behavior, to express the information.

Behavioral understanding of Symbol

In behavioral psychology and psychotherapy using of symbols is connected with the idea of awards and punishments in the processes forming some kind of behavior, and they play a role of mediator when ***connect symbolically*** some behavior with some positive or negative emotion and value. On the same base it was created a scheme for practical action, called ***symbolic economy***. This system is spreading the idea for open and systematic awarding of wanted reactions in behavior, aiming creation and correction of some concrete human behaviors. The chosen reactions are a reflection of these which different dominant groups (for example parents, teachers, employers etc.) understand as usual and normal behavior. At first reactions are defined in general and then if it is necessary – for example when they are more complicated, they are divided to their composite parts.

Symbol understanding in Cognitive-behavioral psychotherapy

Cognitive – behavioral psychotherapy is an approach, intended for changing of symbols, images, signs and thoughts aiming supporting people in solving their emotional and behavioral problems. This approach is based on theory that behavior and emotions to some extend are caused from cognitive processes, which people can learn to change. Traditional psychotherapies always had accepted the idea that cognitions have an important role in people's behavior and emotions, but cognitive-behavioral psychotherapy differences from them because is studying the cognitions only 'now and here'. This approach uses the principles of behavior modification for determination the flowing processes of perception in patient and for identifying those interpretations of his own behavior, which may cause some problems. For decreasing the not-wanted cognitions and offering new knowledge and ways of thinking about the same problem, and as well their strengthening, there are used various behavioral techniques in cognitive-behavioral psychotherapy. Some of them are: registrating the wanted and not-wanted desires and knowledges; using some imagination for make for illustrate the ways in which the new knowledge can be related with the wanted behavior and emotional prosperity; practical applying of new knowledge in everyday life in a way, which to become usual and often used from the patient. The knowledge which is charged to be changed includes different convictions and systems of convictions, different thoughts, images and symbols.

In difference with psychodynamic psychotherapies, cognitive-behavioral one works systematically with internal for patient experiences, while categorizing the processes of thought and relating them with external events through accurate observations during time of therapy on factors like thinking, emotions, work with symbols and their influence on human behavior. Cognitive-behavioral psychotherapy is invented to learning by practicing of concrete skills of own responsibility of patient in their using, which empowers the feeling that has the control in himself and possesses skills for cope.

Symbols in different cultural context

Now after we found that *the meaning of symbols is determined by some conditions*, so therefore it can be changed every time when that would support the processes of communication. In that way it is too easy to relate similar symbols, when we want to express new ideas. Such ability of symbols to change meanings of signs and to create new meaning when there is such necessity helps *symbolic communication* to deliver too complicate and delicate details from one's experience, including new suggestions and insights for external world and internal experiences, which hadn't been expressed never before. Such use of symbols makes human communication much more reach and complex, than simple communication with signs of the other living organisms.

Because of the fact that symbols can be physical objects, on which is given some sense conditionally, the social shared believes and values from all people can be described in some long-term forms like cultural monuments, productions of art, flags and other written documents. Such kind of symbols helps to be kept the information and social traditions for long periods of time. This makes possible gradually storing and revaluation of information for many generations. In that way the whole corps of the shared human knowledge gradually grows up and becomes more sophisticated than one person or collaborating group may hope ever to create. So the symbolic ability of people makes possible the increasing of complexity, which is not possible at anyone other social animal.

Inter-cultural influences on symbol understanding are related with the idea that different norms, rules and lows are important for perception of same images, signs and symbols. An example for such cultural conditioned perception on interpretating one's experience is the well – known diagram with the two parallel lines, and many other investigations like this.

Psychodrama and group therapies' understanding of symbols

Psychodrama is coming like the first group method in psychotherapy, developed for examination of different personal problems, fantasies, fears and desires. This

method is based on the suggestion that investigation of feelings, forming of new models of communication and behaviors is more effective in using of actions similar to real situations from everyday life, than using only verbal methods like in the other therapies. The intensity of experiences is growing up while using various psychodrama methods and especially ***the play with various symbols from patient's personal world***, which helps expression of feelings and emotions.

Borning and development of psychodrama is related with the name of scientist Jacob Moreno. In this method there are used many techniques from theatre though which the patient, using different ***verbal and non verbal symbols***, may replay past, present or future situations from his everyday life, trying to understand them better and with this to reach catharsis in relation with bothering him problems. On the scene, there are played and replayed important valuable for patient problems and situations, and by this psychodrama is aiming to help the participants to distinguish of experience again different hidden feelings but allusioned somehow or other, to success to express them fully and together with this to encourage the trying of new, more effective behavior.

From its very beginning psychodrama has for main purpose to build a therapeutical ground which to serve patient in life as a model, integrating in it all the modalities of living, starting with ***common symbols*** of time, space, reality, and universe and spread all details and nuances of life.

Determination of contents of psychodrama scene depends on the types of symbols which director has determinate in the process of observation of the patient's (protagonist) role playing. Such symbols in psychodrama usually are showing us for an actual or potential field of difficulties in protagonist's behavior. ***There are some kinds of symbols in psychodrama***, which director is carefully using in the therapeutical process of every session. In generally, symbols in psychodrama are divided on verbal and non-verbal ones. In psychodrama usually the protagonist's difficulties, expressed with actions and the non-verbal behavior has wealthier origins for creating and expression of different symbols, rather than traditional verbal forms of psychotherapy. In many times the disparity of verbal and non-verbal behavior in psychodrama is very important and significant fact, which may be studied as an additional symbol.

Methods used by psychodrama director ***for choosing the kind of symbols*** for the work in therapy leads to creating the screenplay for the therapeutical scene. This fact cause special additional discussion about meaning and importance of symbols, their relation with the set scenes and the effect of the used strategies for selection of different symbols for forming the contents of the session.

Psychodrama as a method of action change comes to be something more than behavioral expression or manner of communication by symbols of action. Psychodrama supposes an action with symbols during which the patient makes parallel processes of de-symbolization, interpretation and re-symbolization for re-

construction the painful past experiences, with the support of transformation the symbolic action in different aspects of his Ego, as well as the other Ego-s (played from the other participants of the therapeutical group) in real action. Later, using the group mirror, the personal interpretation is confronted with the personal symbolizations of the other participants and results in reconstruction of symbols of protagonist's behavior. The main triumph of psychodrama is that is transforming a system of not effective actions, thoughts and symbols, to another, more constructional system of patient's behavior, by using various symbols.

CONCLUSIONS

The analysis conducted in this work shows that the main symbols in psychological theories and therapies form several clusters. Underlying this typology lies the classical division of the human psyche created by Freud, who is also the first psychologist created a special theory of symbols and symbolism, namely symbols in unconscious, in conscious and in social norms and morals. As a result of the analysis, the sphere of morality should be extended to the overall effect of culture. The works of other schools develop and further refine this vision of the typology in mental symbols. We offer precisely this separation because it is its natural synthetic continuation of analysis of the concept of symbol in different psychological theories, therapies and understandings.

Looking for the place, role and importance of symbols in the meaning of analytical psychology and psychoanalysis, we find that the concept is conceptualized in terms of explaining the human psyche through the prism of the idea of unconscious and his secret language. There are established the relations of symbolic content of the unconscious with consciousness and moral imperatives.

Still in the study of symbols in the earliest psychological exercises, such as geshtalt psychology, we find that the concept is seen as an explanatory term for the process of receiving and processing of information in consciousness. Later ideas emerge for higher mental functions, which work with human characters is a product of the functions of thinking and speech.

Modern cognitive psychology with a pronounced orientation considered understanding of symbols through the prism of cognitive processes in human consciousness. Here again, the symbol is seen as a vehicle for the transmission of certain information and for communicating on different levels – verbally or nonverbally.

The behavioral theories and therapies considered views of man and his behavior in terms of stimulus-reactive perspective. Thus, through the reactions of the human in certain symbolic stimuli, is considered and the role of symbols. Symbols through the view of this perspective is seen as supporting or rejecting certain incentives.

The study of symbols in transpersonal psychology and various theoretical systems of the Far East offers a different perspective to the problem. Symbols are considered first in terms of altered states of consciousness, and secondly as a separate language system of communication (eg in Chinese) and a cultural phenomenon.

With the advent of the ideas and conceptions of people as moral and intelligent beings, research on their symbols transferred the emphasis in the processes which take place Super-Ego level, or the level of morality and culture.

From what has been said so far shows that the theoretical analysis of the concept of symbols in the psychological understanding its structure suggests its structuring in all three areas – the unconscious, the mind and culture. Summarizing the outlook for the analysis of symbols and symbolization and carried out research can be made and some key findings related to the functions which perform symbol and symbolism in the personal and social life of people.

The first function of the symbol is a magnitude of the research. Directed towards the unknown, the symbol of the underlying explanation of the meaning of experiences. It allows to grasp the connection in a certain way that reason can not be defined as the symbol is used when one part of the site which works, it is known, the other – not. It expands the deliberate in an area where accurate measurement is impossible and the entry contains a challenge there. However, the unknown term to which the symbol oriented our thinking, could not be any extravagance of imagination. Thinking about symbols always express of respect and in a sense, represents an advanced level of understanding.

The second function of the symbol is the function of a substitute. This means that in certain situations it may replace, rather than answer, decision, satisfaction, a question of conflict or a desire to remain indefinitely in the position in the human unconscious. In other words, it is the replacement expression, intended to pave the consciousness disguised under some form of content that for some reason can not penetrate it. Explains the perceived symbol and experience the world as we feel the individual, but not to the level of consciousness, but mainly at the level of the unconscious. It replaces the relationship of the self with the environment or with yourself when this connection is not well recognized. Original function of symbols is precisely this existential opening itself through experience, transmitted from generation to generation time, which may include all personal and social experience.

Another function of the symbol is that of a facilitator. Symbols performs a mediating function between nature and culture, sleep and watch, deliberate and unconscious. It is also the result of a clash of opposing trends and similar forces, which means it is connected in a certain ratio. It compensates dissociative structures of chaotic unconscious in oriented associative structures consciousness. In this sense, the symbol is a factor of equilibrium. It favors the consecutive and suc-

cessive transitions between the levels of deliberate – known and unknown, and the latent synergies between the self and a Super-Ego.

Essential role of the symbol is its unifying force. The mainsymbols attempt to integrate all people – religious, social, psychological, economic and others – at the three levels of the human psyche – conscious, unconscious and svrahsaznanie. In this sense, the image became symbol when its value increased for the individual so that he can contact element of the internal experience of transcendent experience of mankind.

The symbol is one of the most powerful factors for inclusion in reality, thanks to socialize their function. The symbol is a universal language because it is accessible to the mind of every human being and because it comes from the human psyche. If we assume a common basis for collective unconscious able to receive and send messages, it must not forget that this common basis, enriching and diversifying the contribution of all ethnicities and personalities. So apparently the same symbol will have a different color, depending on the various peoples and individuals, and also depending on the historical time and the atmosphere of the present. Sensitivity to these differences bet is to avoid misunderstandings in intercultural communication.

In the study of symbols and conducting experiments to test their place a new basis for understanding human behavior, but from there, and its prognosis. Over the centuries, thanks to the evolution of cultures, universal symbols are translated into new languages and reveal new meanings. But retains its original sense, the primary orientation, fidelity to the original intuition and connection in subsequent interpretations. Narratives and images remain the same, but began acting at different levels of consciousness and perception in an environment that is more or less acceptioning and the nuances of symbols change according to the terms of the relationship that builds them. The deep structure of symbols continue to manage the various interpretations which have been developed over the centuries about the same symbolic axis.

The symbol stands in a broad spectrum of methods of human knowledge. Through the language of symbols people reach much deeper levels of understanding both themselves and others.

Symbolization is a key mechanism in individual development, social interaction and the creation and use of culture. On the one hand symbolized perform socializing function. Through the processes of symbolization people imprint their ideas in various cultural products. Later, when reading these cultural products, one again work with the symbols used by the processes of symbolization.

The process of symbolization can have a therapeutic function. Generation and application of most forms of psychotherapy are based again on the work with symbols. In the process of therapeutic interaction symbolism helps secret and hard facts from the unconscious to be reconstructed and understood in a clear and acceptable way. The process of symbolization is successful implementation both

in psychoanalysis and analytic therapy, by rethinking the hidden messages in the language of the unconscious and in modern cognitive-behavioral therapy in the form of individual symbolic rewards and punishments. Culmination moment in psychotherapy is the importance and use of symbols in psychodrama direction. The use of symbols in psychodrama is a key point because of its versatility – from one side by the events in words and language, on the other – in nonverbal communication and role – playing game.

Diversity of functions and forms of manifestation of symbols and symbolization of people explain the significance of their psychological and psychotherapeutical investigation.

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EMOTIONAL DISTRESS OF PARENTS WHEN CHILDREN PRESENT A PHISICAL ILLNESS

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Abstract. *This study aims to address the area of emotional distress that is present at the parents of children who have different phisical affections. We evaluate the emotional profile of those parents and analize relations that occur between functional negative emotions and disfunctional negative emotions, between rational and irrational beliefs. The 35 participants have been recruited from the parents of children-patients of a medical clinic in Bucharest. Results of the study indicate a specific level of emotional distress and corelations between disfunctional emotions and irrational beliefs.*

Keywords: *health psychology, emotional distress, disfunctional emotions, symptom.*

INTRODUCTION

Health psychology refers to the influence that the biologic, behavioural and social components have on the health and illness states of an individual. In the present study we aim at approaching the issue of the emotional profile parents with ill children have. We have shrunk the area of medical conditions in the research to those that are not invalidating or life-threatening to the children. There are some research works aiming at analyzing the relation parent-child in the case of children with chronical maladies (for instance cancer or diabetes), but we, on our turn, wish to approach this relation also in the case of less serious, but still persistent symptoms. If we refer to the terminology of "psychosomatics", then we take into consideration a scientific branch at the intersection of the medical science and psychology, sociology or anthropology; psychosomatics studies the conditions having a double structure (both psychological and somatical), the aspects connected to somatization or the connections between

mind, body, social context. The study of the parent's emotional profile seems for us to be of a major importance, because the parent is the one offering unconditional emotional support to his ill child, he decides on the manner to approach the symptoms: either by ignoring the clinical manifestation for a long time, or by trying a pseudo-medical solution, applying drug treatments without the advice of a specialist physician; or he presents himself with the child to the specialist physician's, asking for an adequate consultation. It is worth noticing that more and more physicians accept that most of the physical conditions also have a psychological component. In the case of children as well, the same situation is noticed, very often the clinical picture is connected to the evolution of the significant relationships the child has, to the dynamics of family life. In the context of the sometimes repeated occurrence of a clinical symptomatology, the parent is subjected to stressing factos; he has to reconsider his manner of distributing financial resources, he must accompany the child to the doctor's, is witness to the affective distress his child feels because of the symptom, tries to solve the problem, may feel guilty or powerless in front of his child's illness. Therefore, he experiences a large series of emotions, like worry, anxiety, restlessness, depression. The studies performed so far point out those emotions may fit into some basical dimensions: positive emotions and negative emotions. Psychological distress denominates the degree of unpleasant experience, meaning of negative emotion. When emotions contribute to reaching the purposes of an individual, they are functional; when they negatively affect reaching the objectives, they are disfunctional (Opriş, D., Macavei, M., 2007). As long as a method of alleviating the individual's emotional profile is that of modifying one's cognition (David, 2006), we take into consideration in our study aspects related both to parental rational and irrational congnition. Therefore, by evaluating and then restructuring cognition, we may achieve a diminution of their affective distress (of disfunctional emotions).

METHODOLOGY

OBJECTIVES

- To establish the theoretical frame concerning functional and disfunctional attitudes, beliefs and negative emotions experienced by the parents of children who prove a series of medical conditions;
- To analyse the relations between negative emotions and rational and irrational beliefs presented by these parents;
- To establish the vulnerable aspects in parents, that might represent a starting point for a further research, to the purpose of achieving a psychological intervention program for the given families.

RESEARCH HYPOTHESYS

⚜ We presume that the parents whose children have medical conditions have a specific emotional profile, under the aspect of positive and negative emotions.

⚜ We presume that the parents whose children have medical conditions present specific irrational attitudes and beliefs.

⚜ We presume there is an association relation between affective distress and the beliefs of parents having children with medical conditions.

METHOD

The scale for establishing the affective distress profile – "The Affective Distress Profile", Opriş, D. and Macavei, M. (2007), in "A Clinical Evaluation System", coordinator D. David. This scale is composed of 39 items and measures disfunctional negative emotions, but also positive emotions. The tool contains 39 adjectives describing emotions and the items are grouped into the following scales: for negative functional emotions in the "sadness/depression" category, for disfunctional negative emotions in the "sadness/depression" category, functional negative emotions in the "worry/anxiety" category, disfunctional negative emotions in the category "worry/anxiety" and positive emotions.

Subjects must take into consideration "how they felt for the past two weeks" and choose the appropriate answer. The global distress score is calculated summing to the sum of scores in the 26 negative items the sum of the 13 positive items that are therefore reversely scored. At the same time, the scale allows computing the subscale scores, by summing the scores in the items composing them.

The scale for "attitudes and beliefs", short form, elaborated by D. David (2007). This scale is composed of eight items measuring eight types of evaluating beliefs, as follows: exaggerated, absolute pretentions, catastrophic beliefs, low tolerance to frustration, preferences, negative global evaluation, refined evaluation of the adverse characteristic of an event, tolerance to frustration and unconditional acceptance of one's own person and evaluation of specific behaviour.

As the items may be adapted to different contents, the scale can be used for specific situations; in our case it is used to evaluate the parents' beliefs related to the medical condition their son/daughter has. The scale is administered without a deadline; four items (the irrational ones) are directly scored and four are reversely scored (the rational ones).

PARTICIPANTS

The panel of subjects has been composed of 35 parents (30 women and five men) having children with various medical conditions. The children's age is comprised between two years old and nineteen years old. The application of tools has taken place in privately owned medical clinics, where parents came for a check-up with

their children. Yet filling in the questionnaires took place in the absence of children. The conditions children were suffering from were various, such as nasal polyps, bronchitis, seborrheic dermatitis, atopy dermatitis, fracture of the forearm, septal nasal deviation and otitis.

At the time of parents' completing the questionnaires, the children were under specialized medical care. The conditions they suffered from were not life threatening. In order to achieve the study, we have employed the method of questionnaire based inquiry, so that we could obtain both data regarding the investigated psychological aspects, but also information on the familial system, the parents' training, the child's medical condition. We took into consideration the demographic aspects of the panel of participants, as well as the age, gender, level of studies, marital status and age of the child.

RESULTS

This part of the paper is dedicated to observing the relationships between different psychological aspects we investigate, as well as to offering explanations regarding the results. Thus, having in mind the profile of affective distress, we have applied the z (t) test for the average score on a single sample and the data are as follows: m = 93.66, standard deviation = 16.08, standard average error = 2.72. For t=16.474, p-0.0005 the null hypothesis is rejected. But, besides the fact that the test result is significant, we take into consideration as well the effect size index: d=2.89. Therefore, the average score of the research panel significantly differs from the average in the population and the "d" effect size index shows a large difference between the two average figures. So the first hypothesis of the study is confirmed, indicating the fact that those parents with children suffering from physical symptoms will experience certain negative disfunctional or functional emotions in relation to this circumstance. For the 'anxiety" subscale (disfunctional) there was no significant difference between the average in the sample and in the population (m =10.40).

Thus, the parents of a child with a clinical picture experience a series of emotions such as sadness, worry (functional ones), but also anxiety, depression (disfunctional ones), which is understandeable in the context of some existing symptoms; these require frequent visits to the doctor's of the child accompanied by a parent, implies spending time, financial resources (needed for therapies prescribed by the specialist physician). Although the conditions present in the children viewed by this research are not invalidating and life threatening, they are still reflected in the parents' emotional life.

In what regards the attitudes and the beliefs (rational and irrational ones) of the parents with children suffering from various medical conditions, we have obtained the following data: m=11.80, standard deviation 4.83, standard average error = 0.82. When applying the "z" test for a single panel, we have noticed there is

no significant diference between the average score on the research panel and that in the population. We still wished to establish if there are differences on the level of irrational-rational subscales. So, for irrational beliefs in m – 6.60, standard deviation 2.64, there is a significant difference between the average score in the panel and that in the population (for t = 2.154, p <0.05). Still, the effect size index d = 0.33 proves the difference is not large. At the same time, there weren't variations either between the scores in women and men, or in the total score and in the subscales of the tool. So, the second hypothesis was annulled, as there aren't any data to prove the parents of children with medical conditions show irrational or rational beliefs in a higher level, comparing to other parents. In conclusion, this research proves we cannot speak about a larger prevalence of irrational beliefs in those parents of children with various medical conditions.

Concerning the relation between the affective distress profile and the parents' beliefs, the data analyses and the correlation test Pearson show the following: there is a significant relation (on a level of 0.01) between the parental affective distress and thedir rational and irrational beliefs. There is also a substantial association between affective distress and irrational beliefs (r = 0.523 for a level of 0.01). Yet there is no significant association between the affective distress profile and rational beliefs.

At the same time, considering the subscales in the affective distress profile, the research data point out to a significant correlation between anxiety (a disfunctional emotion) and irrational beliefs (r=0.479, at a level of 0.01). This aspect agrees with the studies indicating that the negative disfunctional emotions are determined by irrational beliefs.

Therefore, the third research hypotesis, indicating a significant association between parental negative emotions and positive ones, on one hand and their beliefs on the other, is confirmed. The parents with a high score in irrational beliefs will also show a higher level of disfunctional negative emotions, such as anxiety or depression, but also of functional ones (sadness and worry).

This is important to know, especially when we preview the elaboration of a psychological intervention – counseling. Such a program could aim at restructuring irrational cognition. Thinking of the theoretical model proposed by A. Ellis (the rational-emotional and behavioural theory), we would then consider the fact that the fundament of emotional problems is actually the cognitive distorsion on one's self/world/life. Yet independently of the theoretical model we agree with, it might be of future interest to establish, as an objective within health psychology, the identification and conseling of those parents and then, "in extenso", of those families where we find a disfunctional emotional profile, affecting relations within the family. It is expected counseling such parents to have significant positive effects not only on an individual level, but also on the parent-child, parent-parent relationships and with persons outside the family.

CONCLUSIONS

The aspects related to health psychology hold an ever growing attention. Research diversifies and reaches more and more varied issues. As the present research indicates, there truly is a profile of negative functional and disfunctional emotions in parents having children with a symptomatic profile and a sigificant association between parental emotions and beliefs is proven.

We wish the present study to be a preamble to a series of research viewing the emotional diagnosis in children with various conditions (either acute or chronical), as well as a useful tool in the evaluation of their parents. As parents are, most of the cases, the ones providing emotional, communicational support and involvement to their children, it is understood the fact that their emotional level will reflect into their relationship with the children and will affect them.

It is also important to perform an evaluation of the familial environment, because the research and practice performed by therapists and counselors in this direction proves that, very often, the child's illness is a symptom of a conflicting familial environment or a reaction to a stressing agent either from within the family of outside of it.

At the same time, we propose as further necessary activities the elaboration and validation of a psychological counseling program for children with medical conditions (acute or chronical), specialized on their needs, but also of a program for psychological assistance offered to parents.

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KEEPING THE BOUNDARY BETWEEN INNER AND OUTER REALITY IN COUPLES' RELATIONSHIPS

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Abstract: Long-term relationships in couples are highly emotional and present a serious challenge to the individual's capacity to maintain intimacy and individuality simultaneously. Balancing emotional distance highlights individual problems such as attachment issues and psychological traumata. The paper presents the clinical experience of the author with 20 high conflict couples. Unlike other couples who experience difficulties from the domain of outer reality: life cycle crises, power issues, symmetric escalations, etc., these couples present a picture of poor control over the boundary between inner and outer reality and a constant misuse of the relationship to resolve difficulties in the internal life of the individual. A double vision of the therapist – both systemic and individual, is suggested. Applying Bowen's concepts, these couples may be described as demonstrating fusion in their relationship with intensive, reactive and automatic emotional exchanges. Using Fonagy's concepts, the individuals in the couple may be seen as lacking a sufficient ability to metallize. Understanding the deficits of their affect regulation and reflexive functioning offers an insight in the specific merging of meanings of external and internal experience. The use of couple's therapy techniques in a specific way and the application of a conjoint therapy are suggested as a way to help such couples.

Key words: couple's relationships, couple's therapy, inner and outer reality, transitional space.

INTRODUCTION

The couple's relationships are natural human relationships – based on mutual acceptance, self-emergent, and self-regulated (Maturana, 1988). They have several specific characteristics that distinguish them from other natural relations. First of all, they are characterized by a high level of emotional closeness based on mutual trust, self-disclosure, sharing of emotional experience. When the relationship re-

mains stable through the time, it acquires the characteristics of attachment and care as an essential part of the emotional closeness (Grant & Crawley, 2001). At the same time, the couple's relationships are based on a high level of physical closeness with frequent body contact, sexual intercourse and other full-range sensations experience. In the third place, the satisfaction from the couple's relationship is highly contingent on meeting individual needs. Partners usually expect a wide range of their physical, emotional, developmental and social needs to be acknowledged, respected and satisfied within the relationship. Hence, the latter is loaded with many expectations. Safety, comfort, containment, loyalty are only few of the basic needs included in the list.

All these characteristics are similar in many ways to the mother-infant relationship, although usually the couple's one is more symmetric and bilateral. Therefore, thinking about the couple's relationship as a transitional space (Winnicott, 1971) may be useful in understanding the processes that take place within it. To do this means to accept, that this is a space between the inner reality of each partner (the reality of their mental life) and the outer reality of their interactions and behavior. Each couple gradually develops a shared outer reality which an observer may register and couples' therapy deals with. At the same time, this reality is highly emotional and symbolic for the couple – the spoon from the restaurant where they met is not only a spoon, every gesture of the partner may have a special meaning, and a neutral to the observer word may trigger flooding emotions. Similar to the contents of the transitional space of the child, we never ask whether it belongs to the inner or the outer reality, because we know it is both. Another characteristic of the transitional space which fits perfectly the couple's relationship is the playfulness and the presence of illusions. Even when partners have a sufficiently realistic view of each other, there is a certain amount of illusions – perceiving the other as special, more idealized, "the only one" etc. The illusion of completeness of the Self is perhaps the most common and appreciated one in couple's relationships (Fogarty, 1976). Therefore, the intrusion of the reality from outside the boundary of the relationship may be very painful. Similar to the way that a parent saying to the child "This is not a gun, it is a wooden stick, you stupid kid" kills the fun of the play and deeply hurts the child, relatives saying "truths" about the partner may cause pain and resentment. Probably this is the reason why a disclosure of secrets kept between the partners, and especially the secret of an affair destroys the relational space in a powerful and very painful way which couples' therapists are well familiar with.

There are several theories that help in the understanding of the relational space between the couple. If we accept the understanding of this space as an intersection between the inner and outer reality, we need a "double vision" through relational theories that focus more on the outer reality, and others that focus on the inner one. Bowen's systemic theory brings forward the issue of emotional distance

and the tension between the need for closeness/togetherness and separateness/ autonomy. He emphasizes the difference between fusion – the emotional closeness of undifferentiated selves, and intimacy as a closeness of differentiated individuals. Fusion is evident to an observer as an emotional reactivity with high intensity and automatic response, while intimacy means an ability to chose one's own emotional reaction and to control its level of intensity (Bowen, 1978). The behavior of partners in high conflict couples usually fits well to the description of a fused relationship. Bowen developed an understanding of the emotional processes in the family, which resulted in an individual with a low level of emotional differentiation. Fonagy (Fonagy, Gergely & Target, 2007), on the other hand, focuses on the individual development and functioning of the mind of a person whom Bowen would describe as "undifferentiated". He introduces the concept of "mentalization" describing the ability to assign meaning and to interpret interpersonal actions, to be aware that having a mind mediates our experience of the world. It is a core aspect of human social functioning that develops within the context of the early attachment relationships. Fonagy and his colleagues give an operational definition of the ability to mentalize as a reflective function, which may be measured. This theory allows for the understanding of the inner reality and its influence on the construction of the outer one in the attachment relationships.

Both relational theories offer an implicit idea of the boundary between the inner and outer reality. For example, Bowen defines emotional differentiation as the ability of the individual to distinguish own intents and feelings from the intents and feeling of the other, while Fonagy perceives the reflexive functioning as the ability to know and take into consideration one's own intents and the intents of the other. Both theories point out, that these abilities are contingent on anxiety – the high level of anxiety compromises the clear boundary between the inner reality of the individual and the outer reality of the relationship. They are also contingent on reflexivity, e.g. the ability to use language to understand one's own experience and feelings.

All these considerations have been useful in understanding the specific type of couple's relationships that will be analyzed further.

Description of the couples

Usually couples looking for therapy present problems of the relationship that belong to their shared outer reality and may be observed, understood and treated as interaction patterns, life cycle issues, problem-solving skills, etc. However, in the last 3 years a specific type of couples started to look for help, who did not fit into the classic descriptions and interventions. They presented a high level of conflict often resulting in physical and emotional violence. At the same time, these were well functioning people with successful careers and

sometimes with a very good working relationship between themselves, which focused the attention on their emotional relationship and attachment issues. The observation of their interactions demonstrated intensive, reactive and automatic exchanges when emotional relations were concerned. Poor self-control and total dependence on each other's emotional reactions were evident. These behaviors match Bowen's description of fusion and Fonagy's idea of poor affect regulation. The partners usually looked for help after the disclosure of a love affair or another secret, and shared feelings of disappointment, helplessness, exhaustion and devastation – a sign of deep dissatisfaction and unmet needs. They demonstrated a poor ability to understand each other's perspective (poor reflexive functioning), and insisted on being heard and understood while refusing to make the effort to understand the other. The most striking phenomenon that these couple presented, which made them so different from other clients, was the misuse of the relationship to cope with internal issues. If we talk in the terms of boundary control, we may say that a diffused boundary between the inner and outer reality probably due to the intensive emotions and the poor reflexive functioning allowed for internal contents to "pour" into the space of the relationship, assigning peculiar meanings to events and actions. The result was usually a conflict, which never ended with a resolution or satisfaction. On the contrary – confusion, exhaustion and feeling of misuse were pervasive.

Example 1:

Peter and Diana are in their 30ies. They have been married for 7 years and have 2 children. Both are successful in their careers and share that in working relationships they are a champion team. At the same time, whenever their spouse relationship is concerned, they shared the full range of characteristics described so far. They contacted me after a 1,5 years of high conflict relationship following a disclosed love affair. Both have been into individual therapy for years. During one of the sessions they shared the following pattern: Peter has an unsuccessful day in work and feels dissatisfied. While going home, intensive thoughts about negative behaviors of Diana appear and increase. At home he starts to nag her. She is very sensitive to criticism and gradually gets furious, starts to shout, throws objects. He says that she is crazy and scares him, therefore he withdraws, or starts to shout back "to protect himself". This pattern demonstrates in what way Peter is using the relationship and Diana to regulate his anger, which he is able neither to experience nor to express directly. On the other hand, at the peak of the quarrel Diana often asked him to leave the house, and when he started to do so, used to lock the door and shout that he was abandoning her after all the troubles she has lived through because of him. She has been raised in a family with violence and her fear of abandonment was overwhelming. She was using the quarrels to play over and over the scene of an abandonment which would never become real.

Example 2:

Ivo and Rumiana have been married for 12 years and have an 11-years old child. They have made their own fortune through hard joint efforts and from poverty have moved to a good financial state. They are very close and have relied to each other. Ivo is a person who never talks about problems, and does not believe in sharing emotions. Two years before coming to me he lived through a serious crisis – his business partner cheated him and stole their money. Around this time he started an intensive communication with women in the Internet, and developed a love affair with one of them. He felt guilty and confused, and was terrified by the perspective of Rumiana finding out about this. While dating the other woman, he started to be very jealous of Rumiana, accused her of having a relationship and became violent to her. She was confused and preoccupied with proving her fidelity. In this period we may interpret that Ivo was using the relationship to cope with his unbearable feeling of guilt. It is interesting to mention, that when Rumiana found out about the affair, she was shocked and depressed, and she insisted that Ivo found a way to console her. She tried to maintain the illusion of Ivo as a source of safety and containment and refused to accept reality. When asked what might help her to go on, she answered "I want the reality to be undone". She was cut from her own family of origin which she ran away from through her marriage. She needed the illusion of the "perfect" Ivo in order to cope with her personal issue of security.

As seen in these examples, both partners have used in one way or another the relationship to cope with unresolved personal issues. Although the partners in the first couple were going through an individual therapy, many problems remained outside it, because they were assigned to the other partner, or the relationship. For example, Diana's therapist whom we discussed a common strategy with, would hardly believe that she was capable of the furious outbursts she demonstrated in the couple's sessions.

The couple's therapy

Strengthening the boundary between the inner and outer reality of each partner was applied as a way to help these couples. The interventions included:

- *Clarification and strengthening of the ownership over feelings and experiences.* This includes a discussion on the question whose feelings the partners are acting out, where do they belong – to the outer reality (e.g. anger with a broken promise on part of the partner) or to the inner reality (e.g. anger triggered by the memory of a betrayal), which relationship do they belong to (e.g. a transfer of the anger from the relationship with an abusive father to the relationship with the spouse). For example, with Peter and

Diana it was discussed that the anger belonged to Peter, although he rarely allowed himself to experience it, that it was part of his inner space, and that probably it belonged more to his working relationships. Therefore, coping with anger there was encouraged.

- *Introduction of reality in a bearable way*. As discussed above, the intrusion of reality in a painful way ruins the relational space of the couple. However, sticking to illusions at the expense of reality is a misuse of the space. This intervention was very important to help Rumiana accept the reality that Ivo was not the strong rock to lean upon, but rather a vulnerable person with mental health problems. This helped her to stop insisting through shouting and nervous breakdowns on a containment, which Ivo had no resources to offer.

- *Lowering of emotional reactivity*. Bowen's methods proved to be very useful to this aim. Simple techniques like quiet responding "This is your opinion", "This is the way you perceive things" to an angry provocation or criticism have a visible effect and stop the escalation of the conflict. Talking about oneself instead of about the other is another option. Encouraging the partners to do what they want as individuals, and not what they think others want from them is another important Bowenian technique (Bowen, 1978) .

- *Improvement of self-control.* Many therapeutic methods offer techniques for the enhancement of self-control. These include naming of emotions by the owner and by his partner, and discussion of their body expression; development of the ability for self-soothing and use of containment from the partner; introduction of clear rules or rituals as a way of external self-control. The rules and rituals have been used by many family therapy schools to work on boundaries and lower anxiety. Usually they are applied as tasks offered by the therapist. When self-control is the focus, it proved to be useful to use them with a clear explanation of their effect. I explain to the partners that as they have a problem to control their emotional reactions, the ritual/rule is sort of an external support, a tool that they should use deliberately to reduce their automatic reactions and give themselves space to reflect.

- *Enhancement of reflexive functioning.* Improvement of the ability to understand the perspective of the other and to distinguish between one's own intents and the intents of the other is very important. This may be done through naming of emotions and clarifying the meaning of the interactions. For example, when Rumiana was crying, Ivo perceived this as an accusation and felt guilty, because he was the cause of her grief. The guilt blocked him to be sympathetic and he started to criticize Rumiana for not being able to overcome the past. We discussed the meaning of Rumiana's

crying not as an accusation, but as a mourning of the ruined illusion of her husband, which although far from reality has helped her for many years. The suggestion was to repeat to himself "She is not attacking me, she is mourning a loss, and I may help her with this mourning".

◈ *Referral to individual therapy.* Although couple's work is very useful to strengthen the boundaries between inner and outer reality, the main technology remains within the frame of individual therapy. Therefore, for some of the couples a combination of individual and couple's therapy was suggested, while for others the conjoint sessions were useful to delineate individual from shared issues, to withdraw one's own internal problems from the space of the relationship and to experience an ownership on them to such an extent that going to individual therapy started to be perceived as meaningful.

CONCLUSIONS

The idea of couple's relationship as a transitional space allows for the integration of internal and external issues in the conjoint therapy;

Using relational theories which focus on the interplay of inner and outer reality and their boundary presents a useful perspective and allows for the wider use of techniques from different therapeutic schools;

The strengthening of the individual boundaries in the couple's relationship within a conjoint therapy is helpful with high conflict couples.

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PREDICTORS OF PAIN INTENSITY AND LIFE SATISFACTION IN CHRONIC PAIN PATIENTS

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Abstract. *The relationship between anxiety, depression and pain intensity among patients with different levels of life satisfaction was examined. Previous studies have supported the idea that anxiety and depression play a significant role in chronic pain, but the relationship between anxiety, depression and pain intensity in connection to patient's life satisfaction has not been adequately explored. The sample was 82 patients with chronic pain who were dividing into two groups – with high and with law levels of life satisfaction. Data were collected through individual interviews, using an 7-point numerical pain rating scale, Spielberger Anxiety Scale, Back Depression Inventory and Life Satisfaction Scale. In addition, demographic data were identified from the medical records. The average anxiety and depression levels of the participants were 41.46 (SD 9.02) and 13.89 (SD 7.12) – higher than the normal levels. The levels of anxiety and depression were significantly positively correlated with pain intensity (r = 0.471, p < 0.0005) and was also a significant predictor of pain intensity. There were finding significant differences between groups with high and low life satisfaction. The results showed that anxiety and depression are not only associated with pain intensity but that they also predict it and decrease patient's life satisfaction.*

Keywords: *pain intensity, anxiety, depression, life satisfaction, chronic pain*

INTRODUCTION

The improvements in the medical treatment and care of individuals with chronic pain in recent decades has prolonged the lifespan of these individuals. Since the basic, hard-core medical issues for long-term survival have been brought

under control, the focus has changed towards aspects of quality of life. Life satisfaction has become a key issue in the rehabilitation of patients with chronic pain. However, defining and measuring quality of life remains difficult. Quality of life is generally described as a quantifiable estimation of happiness or satisfaction with those aspects of life which are important to the specific individual. Further, 'quality is seen as synonymous with satisfaction, and life satisfaction is considered to embody an assessment of life as a whole based on how well personal goals match with personal achievements'. Quality of life has been suggested to be synonymous with 'health status, physical functioning, perceived health status, subjective health, well-being and, often several of these at the same time'. Quality of life is also described as 'a global subjective assessment of well-being, hierarchically comprised of subjective perceptions in broad domains'. Thus, one may conclude that Quality of life /life satisfaction is a subjective and general estimation of physical, social and psychological aspects of the current life situation.

The concept of life satisfaction (LiSat) focus on the individual's perception of the difference between the subjective reality and needs or wants regarding several important domains of functioning and activity/participation. This difference can be considered a "goal achievement gap" (Morton, 1995; Campbell et al., 1976; Meeberg, 1993; Fugl-Meyer, 2003).

Pain is a common sequela and known to affect quality of life,(Lundqvis et al., 1991; Wagner et al., 1995; Westgren et al. 1998; Putzke et al., 2002), vocational status (Rintala et al. 1998; Ravenscrof et al. 2000), leisure and recreational activities (Ravenscrof et al. 2000), quality of sleep (Rintala et al. 1998; Norrbrink et al., 2005) and sexuality (Westgren et al., 1997). Pain thus plays an important role in long-term satisfaction with life and rehabilitation outcome.

Pain, depression and anxiety are closely intertwined, and there is increasing evidence that psychological disorders such as depression and anxiety often coexist with and may be correlated with pain.(Symreng & Fishman, 2004). Findings indicate that a significantly higher proportion of individuals with chronic pain are depressed and anxious in comparison with able-bodied persons of a similar background.(Craig et al., 1994; Kennedy & Rogers, 2000). Depression, anxiety and pain affect physical, psychological and social functioning. Therefore, one may assume that chronic pain has a negative impact on perceived quality of life.

The aim of this study was to assess and describe predictors of pain intensity and life satisfaction among individuals with chronic pain.

METHODOLOGY

Pain was measured by asking whether the person had pain or aches at the moment, and in the presence of pain, when it had started. Pain was defined as acute

when lasting the maximum of 3 months and chronic when lasting over 3 months. These definitions follow the recommendation of The International Association for the Study of Pain (IASP, 1986).

In addition patients reporting pain could in the questionnaire choose between two definitions: (1) pain present at least for the last two weeks or recurrent during at least four two-week periods during the last year, labelled as 'intermittent pain', or (2) continuous/chronic pain during the last six months, labelled as 'continuous pain'. From the patients' responses, patients were assigned into one of two groups and an additional group – patients without pain (Table 1).

TABLE 1. PATIENTS WERE ASSIGNED TO ONE OF THE FOLLOWING CATEGORIES BASED ON THEIR RESPONSES IN THE QUESTIONNAIRE

Category	n	Mean age (SD) (years)	Men/women (n)
No pain	50	47.5 (27.7)	22/28
Intermittent pain	42	51.5 (29.2)	20/22
Continuous pain	40	56.0 (28.4)	18/22

The scoring of pain intensities consisted of rating the mildest, the general and the worst intensity on a visual analogue scale (VAS), with divisions from 0 to 100 and the endpoints 'no pain' and 'unbearable pain'. The affective component was rated on a similar VAS with the endpoints 'no unpleasantness' and 'worst imaginable unpleasantness'

Demographics

- Age was scored in a continuous format. Mean age 51.9 years, standard deviation (SD) 14.4, range 20–83 years. Mean age for the men was 51.2 years, SD 31.3 and for the women 52.5 years, SD 26.5. The distribution of age was normal.
- Sex was treated as a dichotomous variable. 60 patients were men and 72 women. Education was assessed as a continuous variable reflecting the total number of years.
- The health variables (ie, chronic diseases, pain locations, medications) were entered as the final set of indicating variables. Standardized beta coefficients were reported to describe therelative importance of the predictor variables within the regression model.

All statistical analyses were performed by using (SPSS Version 10.0, SPSS Inc., Chicago, Ill).

⸾ The Life Satisfaction checklist (LiSat–11) (Fugl-Meyer et al., 2002; Melin et al., 2003) consists of patients estimations of satisfaction with life as a whole as well as satisfaction in ten specific domains: vocation, economy, leisure, contacts, sexual life, activities of daily living (ADL), family life, partner relationship, somatic health, psychological health. The construct validity of LiSat–11 has been shown to be acceptable by using a principal components analysis forming 4 components, whereof 3; "Closeness" (Chronbach's α = 0.79), "Health" (Chronbach's α = 0.66) and "Spare time" (Chronbach's α = 0.68), had acceptable internal consistency. One subscale; "Provision" did not show an acceptable consistency (Chronbach's α = 0.57) (Fugl-Meyer et al., 2002; Melin et al., 2003). The responses were made on a 6 point Likert-scale: 1 = very dissatisfied; 2 = dissatisfied, 3 = rather dissatisfied, 4 = rather satisfied, 5 = satisfied, 6 = very satisfied.

The STAI Scale and Back Depression Inventory, which are used for scoring mood, are a valid, self-rating, screening tests for anxiety and depression.

⸾ Correlations between the global life satisfaction variable number 1 'life as a whole' and general pain intensity, anxiety, depression and present age were made with Spearman's rank invariant analysis. Factors associated with poor life satisfaction were analysed with the SAS logistic regression analysis (SAS, Release 8.2, SAS Institute Inc., USA). The global life satisfaction item 'life as a whole' was classified into two response categories: unsatisfied (Lucke et al., 2004) and satisfied (Lundqvist et al., 1991).22 A logistic regression model was then performed with life satisfaction as a binomial response and ratings of pain and mood.

RESULTS

Life satisfaction, anxiety and depression

⸾ Patients with pain and patients free of pain were dividing into two groups – with high and with law levels of life satisfaction. There were finding significant differences between these two groups. Patients with high level of life satisfaction represents significantly lower levels of anxiety (t=2,84;p<0,001) and depression (t=2,75; p<0,005) in comparison with patients with low level of life satisfaction.

⸾ Correlations between life satisfaction and associated variables Using the Spearman rank order correlation test, the global life satisfaction variable number 1 'life as a whole' was found to be correlated with depression, r_/0.64; anxiety, r_/0.50; and ratings of general pain intensity, r_/0.31. Little or no relationship (r-/0.20) was seen with ratings of the worst pain intensity and age at the time of the study.

⫲ The average anxiety and depression levels of the participants with pain were 41.46 (SD 9.02) and 13.89 (SD 7.12) – higher than the normal levels. The average anxiety and depression levels of the participants free of pain were 34.16 (SD 8.92) and 8.78 (SD 6.53) – on the normal levels The levels of anxiety and depression were significantly positively correlated with pain intensity ($r = 0.471$, $p < 0.0005$). These results confirmed the idea that just pain but not simply illness increases anxiety and depression levels.

Life satisfaction with regard to pain

⫲ Life satisfaction with regard to pain in chronic pain population. When ratings of life satisfaction were calculated in the three groups – individuals without pain, patients with intermittent pain and with continuous pain, significant between-group differences were found for six of the nine variables: the global item 'life as a whole' (P_/0.0032), 'financial situation' (P_/0.002), 'leisure' (PB/0.001), 'contact friends' (P_/0.002), 'ADL' (P_/0.009) and 'family life' (P_/0.0036).

⫲ Between-group differences were close to being significant for the variables 'vocational situation' (P_/0.06) and 'partnership relations' (P_/0.076) while differences for the variable 'sexual life' (P_/0.12) were non-significant. Multiple comparisons between groups by means of average ranks showed that patients with continuous pain scored significantly lower on 'financial situation', 'leisure' and 'contact friends' than did patients with no pain. Further, patients with continuous pain scored significantly lower on 'life as a whole', 'ADL' and 'family situation' than did patients with no pain.

Pain intensity

Rating of pain intensities differed between the groups 'intermittent pain' and 'continuous pain' with patients having continuous pain scoring higher on all items ($p<0,001$) (Table 2).

TABLE 2 RATINGS OF PAIN INTENSITY IN PATIENTS WITH INTERMITTENT AND CONTINUOUS PAIN

	Md (median); IQR (interquartile range).
Intermittent pain	5 (0–13)
Continuous pain	31(13–52)
P-value	<0,001

Pain and mood

- The average anxiety and depression levels of the participants with continuous pain were 41.46 (SD 9.02) and 13.89 (SD 7.12) – higher than normal levels.
- Anxiety ratings on the STAI Scale differed between the three groups of patients (P<0.001). A significant difference was found between patients with no pain and continuous pain. The median value for those reporting no pain was 3 (interquartile range (IQR) 1;4.5), intermittent pain 3 (IQR 1.5;7) and continuous pain 5 (IQR 2;9).
- Ratings of depression varied in a similar way as for anxiety (P<0.0004). Significant differences were found between patients with no pain and continuous pain as well as between those with intermittent pain and continuous pain. Patients with no pain and intermittent pain had a median of 2 (IQR 1;4) and patients with continuous pain a median of 4 (IQR 2;6.5).

Predictors for low life satisfaction scores

- In the logistic regression analyses, we attempted to identify predictors for low scores of life satisfaction (i.e. scores of 1–4 out of 6). We included presence or absence of pain, no pain/intermittent pain/continuous pain, ratings of general pain intensity, ratings of anxiety and depression. The above-stated variables had a P-value of B/0.20 or r=/0.30 in the univariate analysis.
- The pain variables were linear combinations of each other (as the category 'no pain' was common in all of the pain variables), and each pain variable was therefore tested separately in a logistic regression analysis together with the predictors 'anxiety' and 'depression' Since no patient with a high satisfaction (5 or 6) of 'life as a whole' in this sample was considered to be depressed, an empirical odds ratio for low life satisfaction could not be calculated. We therefore used an exact logistic regression analysis to predict this odds ratio. The different analyses show that anxiety and depression together can explain about 32% (max-rescaled R-square a generalized coefficient of determination) of low satisfaction with 'life as a whole'. The pain variables were not significant when anxiety and depression were included in the logistic regression.

DISCUSSION

In this study we assessed life satisfaction in patients with chronic pain in relation to pain perception and mood variables – anxiety and depression. The results show that individuals with continuous pain experienced interference in life satisfaction in most domains of the LiSat–11: life as a whole, ADL, family life, financial situation, leisure and contact friends. Individuals with intermittent pain perceived interference with financial situation, leisure and contact friends only.

- Patients with SCI and pain reported a lower satisfaction with life in general than patients without pain. In the regression analysis, higher ratings of anxiety and depression were more likely to be responsible for this than pain itself.
- An additional reason for the patients with SCI and pain to report a decreased satisfaction with life could be that they are less likely to have a satisfying vocational status and thereby a more stressed financial situation, which might negatively influence 'life as a whole' (Melin et al. 2003).
- A number of studies have assessed QoL/life satisfaction following an SCI. Several of these have found pain to be an important factor that negatively influences perceived life satisfaction (Putzke et al., 2002; Westgren & Levi, 1998).
- Mood disorders are a well-known consequence of the chronic pain itself (Krause et al., 2000). Several authors reports that between 25% and 75% of patients with chronic pain suffer from clinical depression, and around 50% of patients with pain and depression experience the symptoms simultaneously. Besides pain, mood disorders have also been found to predict QoL perception in chronic pain populations (Kreuter et al. 2005). besides pain, mood disorders have also been found to predict QoL perception in chronic pain populations. Depression and anxiety may negatively influence physical activity, ADL, social activities and ability to work, subdomains that were seen to be scored lower by our patients with pain.
- To improve life satisfaction, it might be important to simultaneously decrease pain intensity and improve mood, which is why we suggest that chronic pain should always be treated in a multidisciplinary setting where pharmacological, physical and psychological therapies are combined.

CONCLUSIONS

- Life satisfaction is negatively affected in patients with chronic/continuous pain compared to patients without pain.
- Higher levels of anxiety and depression seem to be predictive for this decreased life satisfaction.
- Long-term pain is strongly associated with low life satisfaction.
- In order to increase life satisfaction, interventions related to social factors seem to be important.

ACKNOWLEDGEMENTS

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PREVENTIVE INTERVENTION (EXPLORATORY TRIAL) FOR CHILDREN OF PARENTS WITH CENTRAL NERVOUS SYSTEM INJURY

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Abstract. *It has long been known that somatic illness in a parent is a risk factor for later psychiatric disorders in children, and despite this, little attention has been paid to children's mental health when a parent is severely ill. In acute central nervous system injuries, the evolution of illness is different from other severe illnesses in parents as described in the literature, such as cancer, diabetes, multiple sclerosis, AIDS, haemophilia. However, children reactions being exposed to an ill parent suffering for acute central nervous system injury are insufficiently known, studies being almost inexistent. The research is based on a longitudinal study and comprise 58 families (35 ill fathers and 23 ill mothers), 15 children 4–10 years old (6 boys and 9 girls) and 43 adolescents 11–18 years old (16 boys and 27 girls), and aims to evaluate and compare the data obtained from the two sample groups during a six months period. In a pre-post measurement design, families getting counseling were compared to a group of families, who solely are given a brochure and serve as controls. The following instruments were used: Child Behaviour Checklist, Youth Self Report, and Opinion on the Counselling Procedure. It was found that those receiving counseling intervention have had a good outcome over time and that "face-to face" interventions through counseling sessions seems to be more effective in reducing children's stress symptoms than written advices and recommendations by a brochure.*

Keywords: *children, counselling, preventive intervention, somatically ill parents*

INTRODUCTION

A severely ill person has to cope with medical procedures, hospitalization, declines in socio-economic status, weakening of bodily strength, changes in bodily appearance, increasing dependency upon others, shifts regarding his/her future perspectives, and, in cases of a terminal prognosis, the direct threat to his/her life (Romer, Barkmann, Schulte-Markwort et al., 2002). If this person is a parent, the consequences of these stressor factors affect the entire family, which may result in a lasting distortion of the children's social and emotional development.

In studies on parents with cancer, multiple sclerosis, heart disease or hemodialysis it appeared evident that children of seriously ill parents had higher scores in symptom scales than controls with a tendency towards internalizing symptomatology. Armistead, Klein & Forehand (1997), suggested parental depression, withdrawal, interparental conflict, and parental divorce as factors mediating children´s maladjustment by disrupting the parenting function.

Although most of the studies were focused on cancer, multiple sclerosis or AIDS, acute central nervous system injury, by its impact and consequences both for injured person as well as for family members, represent a disease with significant psycho traumatic potential (Orsillo, McCaffrey & Fisher, 1991).

In acute central nervous system injuries, the evolution of illness is different from other severe illnesses in parents as described in the literature, such as cancer, diabetes, multiple sclerosis, AIDS, haemophilia. However, children reactions being exposed to an ill parent suffering for acute central nervous system injury are insufficiently known, studies being almost inexistent.

The special characteristics of this acute condition and its course can be described as follows:

- from the very beginning the child learns about the event, which is usually an accident, as he or she cannot be "protected" by any so called "conspiracy of silence";
- the evolution of the illness is usually regressive to amelioration, but in the case of severe forms it is slow, with the risk of complication and deterioration;
- the successive emotional reaction of the family goes through a large spectrum from exaggerated hopes to sheer disappointment;
- the degree of existential disorganization is significant, often with massive emotional participation of children due to the direct contact with the ill parent, the reactions of healthy parent etc.

Brain injury has a tremendous impact on the family system, and places a significant demand on the emotional resources of individual family members. There are a myriad of emotional reactions typically experienced by spouses, the survivor and the family as all attempt to adjust to the brain injury. Empirical evidence exists that suggests that relatives of individuals with head injuries tend to do worse than

relatives with other, equally severe disabilities, and it has been well established that the head injury impacts the family as well the patient, and that the stress and burden upon relatives are significant (Orsillo, McCaffrey & Fisher, 1991).

Although many professionals recognize the potential psycho traumatic effect of parental illnesses for children (Rutter, 1966; Lezak, 1986; Lewandowski, 1992), some of the most precious information came from those working on a daily basis with those kinds of cases, being directly involved in care process (DeBoskey & Morin, n.d.; Buzzel, 1994; Johnson, 2000). They have noticed that in those cases, the entire family system and not just the individual has been "injured". The family system refers to the relationships and roles that family members fulfill in their daily lives with each other (Uomoto & Uomoto, n.d.). In the family system, if one member is ailing or for some reason cannot fulfill their customary role, another family member typically takes over the role.

Emotional changes as a result of the brain injury can also mean that family members may react differently to the head injured person. For example (DeBoskey & Morin, n.d.), brain injury can result in an increase in anger problems and irritability in the survivor. Family members who interact with the survivor may find themselves more carefully choosing their words, or avoiding certain topics of discussion for fear of touching off an anger episode. Over a prolonged period of time of "walking on eggshells", family members may become weary and lose their patience with the survivor, which may in turn make the survivor more prone to anger outbursts. Thus, the atmosphere in the family becomes much different than it was before the injury. Adjustment to the brain injury is often extremely difficult for spouses because they experience unique problems. Mourning can be complicated for the spouse since they often continue to live within their husband's or wife's physical presence but have, in effect, lost the person they married if significant personality changes have occurred. Sometimes the personality change in the survivor is subtle and not readily apparent to other family members or friends. Even spouses say they cannot "put their finger on it" yet something about their mate has changed (Uomoto & Uomoto, n.d.). If significant personality changes have occurred spouse and families grieve the loss of the person they once knew. As Mary Romano, a social worker has termed it, families mourn the "personality death" rather than the bodily death of the survivor (Uomoto & Uomoto, n.d.). This is one of the most complicated and painful aspects of adjustment to head injury. Often spouses and families are left with the uncomfortable feeling that they are living with a familiar stranger.

METHODOLOGY

This present study has been conducted in the context of the international research project COSIP – Children Of Somatically Ill Parent (QLG–4-CT–2001-02378, 5th

Framework Program QoL) which was funded by the EU and coordinated by the Universitätsklinikum Hamburg-Eppendorf, Germany.

The aim of the present research was to evaluate and compare the data obtained from 58 families having a parent with acute central nervous system injury regarding different prevention intervention techniques for families and children having an acute CNS injured parent.

In order to reach the above objective the following research question and corresponding hypothesis were set:

Q: Is a child-centered family counseling intervention especially designed for families with a CNS-injured parent more effective in reducing stress symptoms in children than an information brochure that gives guidance to parents and families how to address children's needs in this situation?

Hy: "Face-to face" interventions through counselling sessions are more effective in reducing children's stress symptoms than written advices and recommendations by a brochure.

Individuals were all patients with acute CNS injury, hospitalized in "Dr. Bagdasar" Emergency Hospital neurosurgery clinic in Bucharest. During a 12-months period, all the cases hospitalized with specific pathology were monitorized. From those, all cases were selected fulfilled the following inclusion criteria:

a)   for the family: stabile domicile in Bucharest; having a children between 4 –17 years old; legally constituted family, both parents alive (typical family constellation).

b)   for the ill parent: brain injury severity between 3 and 12 on Glasgow scale (severe 3–7, medium 8–12); hospitalization in a neurosurgery clinic; approximately one week before living the hospital, after vital risk stage is overtake and amelioration evolution begin; without somatically or mentally illnesses prior to current affection.

c)   for the spouse / healthy parent: consent signature; minimum 4 years of school education; speaking, reading and writing Romanian language; without somatically or mentally illnesses prior to current affection of spouse.

d)   for children: somatically health and without any treatment for psychiatric disorders prior to current traumatic event; between 4 –17 years old; living with both parents; no IQ deficiency,
and, for self reporting children: minimum 4 years of school education; speaking, reading and writing Romanian language.

Table 1 and Table 2 reflect the distribution of subjects in our two experimental groups, being observed a relative similar distribution of main indicators.

TABLE 1. ILL PARENT AND CHILDREN DISTRIBUTION BY GENDER (INTERVENTION GROUP)

Ill parent			Children	4 – 10	11 – 18	Total
Male	20		Boys	3	8	11
Female	9		Girls	6	12	18

For this counselling group, data were obtained from 20 families with ill fathers (M = 40.35 years, SD = 5.74) and 9 families with ill mothers (M = 37.0 years, SD = 4.84), 3 child-age boys (age 4–10; M = 7.33 years, SD = 3.05) and 6 child-age girls (age 4–10; M = 7.00 years, SD = 2.52), and from 8 adolescents boys (age 11–18; M = 13.87 years, SD = 2.10) and 12 adolescent girls (age 11–18; M = 13.81 years, SD = 1.78).

For the control group, data were obtained from 15 families with ill fathers (M = 42.73 years, SD = 6.54) and 14 families with ill mothers (M = 40.85 years, SD = 7.41), 3 child-age boys (age 4–10; M = 7.66 years, SD = 2.08) and 3 child-age girls (age 4–10; M = 7.33 years, SD = 3.05), and from 8 adolescents boys (age 11–18; M = 14.12 years, SD = 1.95) and 15 adolescent girls (age 11–18; M = 14.40 years, SD = 1.80).

TABLE 2. ILL PARENT AND CHILDREN DISTRIBUTION BY GENDER (CONTROL GROUP)

Ill parent			Children	4 – 10	11 – 18	Total
Male	15		Boys	3	8	11
Female	14		Girls	3	15	18

In order to reach the proposed objective, were used as methods, direct observation combined with interviews and questionnaires, both methods corroborated with the two intervention techniques – providing of psycho-educative information (via brochure) and psychological counselling. The following standardized instruments were administered:

Basic Documentation (BADO) it is mainly based on the Clinical Basic Documentation of the German Society of Child and Adolescent Psychiatry (DGUJPPP), which was modified and adapted for the COSIP Study Project. It comprises documentation on socio-demographic and socio-economical status as well as health and other information related to the family environment of the child.

Child Behaviour Checklist (CBCL) by Achenbach, (1991) parent/children version was used to measure emotional and behavioural problems in children and adolescents. In this questionnaire 113 items are listed in order to register emotional and behaviour problems. The parents are asked to assess, to which degree their child displayed the listed symptoms in the previous 6 months. The items are rated on a 3-point scale ranging from 0 = never, 1 = often, to 2 = very often. Besides describ-

ing children in terms of many specific items, the CBCL is also designed to identify syndromes of problems that lead on one factor. It displays the following first-order syndrome scales: Withdrawn, Somatic complains, Anxious/Depressed, Social problems, Thought problems, Attention problems, Delinquent behaviour, and Aggressive behaviour. Using factor analyses for these eight scales, the authors also were created the so-called second-order scales, with the syndrome scales designated as Withdrawn, Somatic complains and Anxious/Depressed grouped under the heading Internalizing Problems and the syndrome scales designated as Delinquent behaviour and Aggressive behaviour grouped under the heading Externalizing Problems (Achenbach, 1991). Moreover, a total problem score can be built by summing up all items. For all scales, higher scores stand for a greater degree of problems.

Youth Self Report (YSR), a corresponding self-report version of the CBCL, was used for self-assessment of children (Achenbach, 1991). It is designed to be completed by 11 to 18 year-old children having a mental age of at least 10 years. Besides enabling youths to describe themselves in terms of many specific items, the YSR is designed to identify syndromes of problems that tend to occur together. The YSR includes 112 items referring to symptomatic behaviours and feelings that individuals rate on a 3-point scale as "not true," "somewhat or sometimes true," or "very true or often true" of themselves. By adding the respective symptom items, eight syndrome scales can be determined (withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behaviour, and aggressive behaviour). By adding the respective syndrome scales, two spectrum scales and a total score can be obtained (internalizing, externalizing, total problems).

Opinion on the Counselling Procedure – FBB (Fragebögen zur Beurteilung der Behandlung, Mattejat & Remschmidt, 1993) for evaluation of the therapeutically intervention quality: acceptability of intervention (0=completely ineffective, 1=predominantly ineffective, 2=partly successfully, 3=predominantly successfully and 4=completely successfully), success of intervention (0=no acceptability, 1=little acceptability, 2=moderate acceptability, 3=good acceptability and 4=very good acceptability) and total score scales – parent version QOCS-P 20 items, children version QOCS-C 20 items and therapist version QOCS-T 24 items. The FBB is the most widely used instrument for evaluating interventions in child and adolescent psychiatry in the German speaking area. It has been slightly modified for this study by adapting some of the items to the context of preventive counselling (i.e. replacing "therapy" with "counselling sessions").

RESULTS

Regarding the research question and the corresponding hypothesis which stated that "face-to face" interventions through counselling sessions are more effective in reducing children's stress symptoms than written advices and recommendations

by a brochure, methodological issues placed some difficulties in setting up a good analytic strategy. First, after the comparison of total problems score (both CBCL and YSR) between these two groups it was found that their initial status were not as similar as it had been expected in a randomised distribution. All means and standard deviations are shown in table 3. But, after a careful analysis it was noticed that the observed differences were not statistically significant, neither for CBCL (t(36) = −1.46, p > .05; ns.), with small effect size (d = 0.4), nor for YSR (t(44) = 1.82, p > .05; ns.), however the effect size was medium (d = 0.5). These data allow going further in verifying our hypothesis with some modifications in the analytic strategy.

TABLE 3. TOTAL PROBLEMS SCALE SCORE (CBCL AND YSR) COMPARISON BETWEEN INTERVENTION AND CONTROL GROUPS

M (SD)	Intervention group		Control group	
	CBCL	YSR	CBCL	YSR
Total problems	58.95	59.83	56.16	55.22
score	(6.74)	(9.85)	(4.66)	(7.32)

Anyway, due to the fact that their initial status was not similar and also because the aim was to asses the time evolution only of those having problems, for measuring intervention effects, were included in analysis over time, only the cases which scored above the cut-off score, and therefore could be defined as symptomatic. Following a longitudinal approach, time evolution of total problems scale scores from CBCL and YSR data from intervention group were compared with the corresponding data from the control group. Second, the factors contributing to a better or less good evolution of the children after the psycho-trauma of an acute severe somatic parental illness are complex. The problem is, if the "therapeutic effects" can be discriminated from a spontaneous good evolution of the child related to time, to a faster recovery of ill parent or to factors of resilience as good family coping mechanisms.

Knowing that the above comparison will not be sufficient for discrimination of the therapeutic effects from a good spontaneous evolution (and also being aware that this was a risky approach), the introduction of tests for subjective therapeutic satisfaction (Mattejat & Remschmidt, 1993; Mattejat, 1997) for those who have received an intervention, became a necessity.

The comparative analysis and corresponding results are presented in table 4 for parental reporting perspective and in table 5 for self-reporting perspective. Thus, from parental perspective, for the intervention group, the above results shows a decrease in total score problems from t0 (initial evaluation) to t2 (final evaluation after 6 months), even though the difference is not statistically significant (t(9) = 1.63, p > .05; ns.). But, having an almost large effect size (d = 0.7) these results emphasize a tendency according to which those receiving counselling have had a good evolution over time.

TABLE 4. PARENTAL PERSPECTIVE COMPARISON BETWEEN INTERVENTION AND CONTROL GROUPS

M (SD)	Intervention group		Control group	
	CBCL (n = 10)		CBCL (n = 5)	
Total	t0	t2	t0	t2
problems	64.10	61.40	62.00	62.80
Scale	(2.37)	(4.47)	(1.41)	(1.92)
Cohen's effect size	d = 0.7 medium		d = -0.4 small	

Course of CBCL total problems scores over time
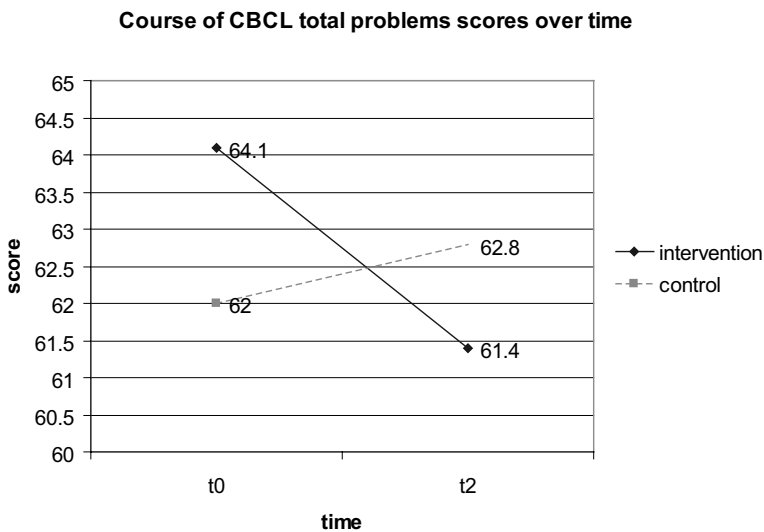
FIGURE 1. Course of intervention and control groups CBCL total problems scores over time

As for the control group, no amelioration of total score problems was found, on the contrary the results show a slightly increasing of total problems scale score, but this is almost insignificant (t(4) = 1.37, p >.05; ns.; d = -0.4 small effect size). Therefore, from parental perspective, the stated hypothesis is confirmed, although the results were supported only by effect size. Figure 1 show in a more suggestive way the evolution over time of both intervention and control group.

From self-reporting perspective, the results presented in table 5 show for both experimental groups a decrease of total score problems. The total problems score in intervention group significantly decrease from t0 to t2 (t(8) = 3.05, p < .05), having also a medium (almost large) effect size (d = 0.7). Again, for the intervention group, the previous mentioned tendency (those receiving counselling have had a

good evolution over time) was confirmed by the above data, in the self-reporting perspective the difference being statistically significant.

TABLE 5. SELF-REPORTING PERSPECTIVE COMPARISON BETWEEN INTERVENTION AND CONTROL GROUPS

M (SD)	Intervention group		Control group	
	YSR (n = 9)		YSR (n = 7)	
Total	t0	t2	t0	t2
problems	67.66	60.44	64.28	59.28
Scale	(11.14)	(9.28)	(4.27)	(6.92)
Cohen's effect size	d = 0.7 medium		d = 0.8 large	

Regarding the control group, the results show also a decrease in total problems score over time, but the difference between t0 and t2 is not statistically significant (t(6) = 1.99, p > .05; ns.), even though the effect size is large (d = 0.8). Here it was observed a different pattern from parental reporting perspective where the results showed a static situation. In this case, from self-reporting perspective, the results are in concordance with the stated hypothesis, both from effect size and significance test analysis. Therefore, for self-reporting perspective, the hypothesis is confirmed. Figure 2 present the YSR total problems score evolution over time for both intervention and control group.

Course of YSR total problems score over time
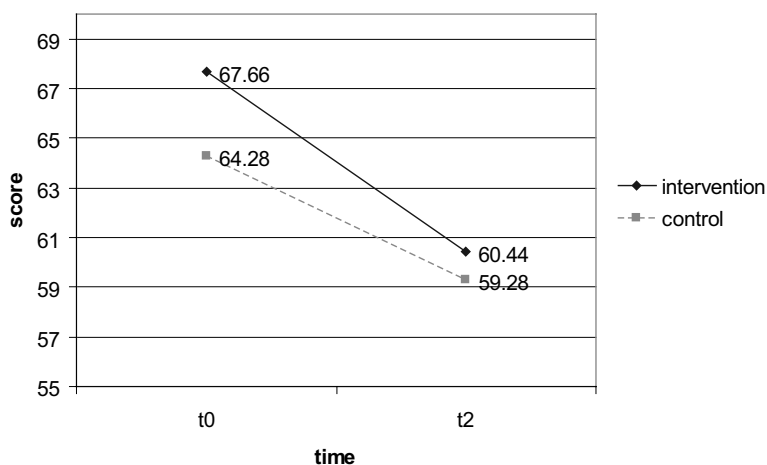
FIGURE 2. Course of intervention and control groups YSR total problems scores over time

But, as it was mentioned before, those results must be approached with caution because the intervention effects can hardly be discriminated from a spontaneous good evolution of the child related to time, to a faster recovery of ill parent or to others factors of resilience, and also because the analysed sample is relatively low. In order to validate in a way the above results regarding the evolution of intervention group, the tests for subjective therapeutic satisfaction was used (Mattejat & Remschmidt, 1993; Mattejat, 1997) for those who have received an intervention. Figure 3 show the corresponding scores from different reporting perspective.

The tests of therapeutic satisfaction confirmed quality of intervention through high scores of success and acceptability recorded by all participants (child, parent and therapist). The differences between different reporting perspectives were small. Table 6 shows the meaning of the above scores.

TABLE 6. OPINION ON INTERVENTION SCORES SIGNIFICANCE

	Success of intervention		Acceptability of intervention
4	completely successful	4	very good acceptability
3	predominantly successful	3	good acceptability
2	partly successful	2	moderate acceptability
1	predominantly ineffective	1	little acceptability
0	completely ineffective	0	no acceptability
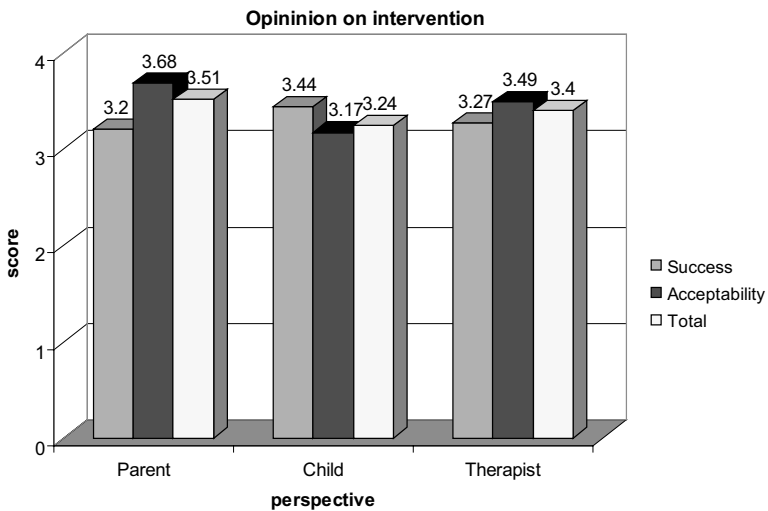
FIGURE 3. Different perspective regarding opinion on intervention

Children appreciated most the success of the intervention, confirming in this way the above results which proved that their level of symptomatology as measured by YSR second order scales, decreased over time. Parents' considered the acceptability of therapeutic relationship being at first. This is somehow in concordance with the previous results, where, from parental perspective (CBCL second order scales) no statistically significant decreasing of scores was reported. The therapists reported high scores both on acceptability and success which is similar to parents and also with children opinion, their direct beneficiary, and therefore represent the best validation one can expect.

In sum,

- it was revealed a tendency according to which those receiving counselling intervention have had a good evolution over time;
- "face-to face" interventions through counselling sessions seems to be more effective in reducing children's stress symptoms than written advices and recommendations by a brochure;
- tests of therapeutic satisfaction confirmed quality of intervention through high scores of success and acceptability recorded by all participants (child, parent and therapist).

DISCUSSION

Regarding the question if a child-centered family counselling intervention especially designed for families with an acute central nervous system injured parent are more effective in reducing stress symptoms in children than an information brochure that gives guidance to parents and families how to address children's needs in this situation, the data obtained in follow-up assessments (t2) from parental perspective, for the intervention group, shows a decrease in all second order scales scores of CBCL, even though the difference is not statistically significant. But, as it was mentioned before, all results were interpreted also from effect size perspective, and in this case, having an almost large effect size (d = 0.7) these results point out to a tendency according to which those receiving counselling have had a good evolution over time. Data from the control group showed that no amelioration of CBCL second order scales scores, emphasizing the fact the delivery of a brochure with basic information, even it is a real advance in helping families with an ill parent has limitations. The similarity in approach with direct counselling cannot reduce the fundamental limits of brochures imposed by the way of communication used. The written messages are directed almost only to the cognitive level. It lacks the emotional content, fundamental for supportive component of any counselling intervention, support needed also by the parent itself. Empowered by new information, the healthy parents remain the single real helpers who interpret new situations and acts in their own way. The number and variety of new situations and

of possible life crises cannot be covered by limited dimensions and content of a brochure, often the parent being alone and helplessness.

In counselling intervention the direct interactions of therapist with the child and separate with the parents offer them the chance to be understood as distinct persons with own problems. From this perspective the preventive counselling intervention is different from classical family therapy (Minuchin, 1998) where the whole family is brought together for working through its conflicts. From the self-reporting perspective, the results showed a decrease of YRS second order scales scores over time for both experimental groups, with the remark that the difference is not statistically significant for the control group, but the effect size is a large one. These results, corroborated with parental perspective findings, support the idea that "face-to face" interventions through counselling sessions seems to be more effective in reducing children's stress symptoms than written advices and recommendations by a brochure. In sum, the dialogic experience in counselling which involved emphatic listening and emotional support showed superior effect as merely psycho educative approach as administered by a brochure. The experimental controlled trial provided valuable data which suggest that for lasting and desirable outcomes truly dialogic intervention is necessary: a convenient duration, more sessions placed at reasonable intervals and acceptable settings, because the prevalent data showed that the therapeutic effects set up and grow up in time through a cumulative process.

In order to validate in a way the above findings the tests of therapeutic satisfaction were used, which confirmed the quality of intervention through high scores of success and acceptability reported from all participants' perspectives (child, healthy parent and therapist).

One explanation of these good results could be found in the predominant medium and high level of education of parents from our sample. They have accepted the idea of preventive intervention and mediated the separate interviews with their children. The objectives of such type of intervention were reduction of intensity of the family emotional reactions, especially those of the children, a better understanding of ill parent reactions, a good involvement of each member of the family group into the process of care, of physical and psychological rehabilitation, the prevention of social isolation and the restarting of a normal life, as it is possible, in the same time with restoring of emotional rebalance.

The excellent degree of cooperation and compliance of family was expressed also through a minimal percentage of 3.4 % drop-outs compared with those habitually 30–40% met in psychotherapeutic practice (Haynal, Pasini & Archinard, 1997). The parents' role was that of facilitators of therapeutic contacts with children. The preliminary discussions with them created a positive atmosphere for meetings with the children. The contacts with child include implicitly his healthy parent who is the majority of cases, the daily carrier of emotional support for children.

Even though results of this the pilot intervention study are very preliminary and must be carefully looked at, they have revealed the tendency according to which the intervention group has had a good evolution over time. Moreover, it was also revealed that "face-to face" interventions through counselling sessions seemed to be more effective in reducing children's stress symptoms than written advices and recommendations by a brochure. There is a clear need of further investigations, especially designed to avoid at least the methodological issues encountered in this present exploratory trial. Regarding the intervention process, there are still unanswered questions such as duration, timing, number of sessions, content and people involved, which are to be answered in future research.

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FAMILY ENVIRONMENT INFLUENCE ON THE AGGRESSION AND DEPRESSION IN CHILD AGE: IMPLICATION TO THE COUNSELLING PRACTICE

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Abstract. In the article are investigated the influence of intra-family relationships in three aspects: first,in the relation to parental models of overprotection, dominance, emotional negligence and support, second-in relation to the marital relationships, and third– in relation to the organization of the conditions of life. They have been formed two hypothesis. According to the first hypothesis the authoritarian and overprotective style of parenting lead to aggression and depression. According to the second hypothesis the marital conflicts and emotional negligence as a parental style lead to depression in childhood. As a whole the hypothesis were confirmed.The results could be interpreted in the confirmation of the idea that the aggression in childhood reflects"lieing behind" depression. The implications for the consulting practice were brought out.

INTRODUCTION

It was found that the family environment influence the psychological health and personal growth.(Hoffing,1965) One of the aspects of the family environment are the models of parenting, which we suppose to influence the emotional status and behavior of the children.

PARENTAL MODELS (Herbert,Harper-Dorton,2002) and (Стаматов,2008):

1. **DOMINANCE**.In this model the parents are authoritarian, restrictive as they consider that the child has no need from freedom and rights and that he has to obey of their will and authority. The possibility for choice of behavior is not given to the child, so his autonomy is limited and his right to make objections is eliminated. As a result the child develops

sense of guilt, anxiety and suspiciousness to the surrounded people. The results could be – hostility and difficulties in the social contacts of the child .

2. **REJECTION.** This model is related to parents, which neglect their children. The negligence could be in two aspects: as constant absence of implementation of parental functions or as manifestation of emotional coldness. In this relation it should be noticed the concept of emotional abuse including: constant criticism; deprivation the child of awards as smiling of his positive behavior; discouragement of the emotional attachment of the child when it is seeking closeness. In this the context the child is deprived of satisfying his basic needs, which include also the need of acceptance and love. Emotional negligence could lead to feelings of helplessness, guilt, and complex of inferiority .

3. **OVERPROTECTION** It could lead to a passive and dependant behaviour of the child. If the child is prevented from acting independently the result could be– indecisiveness. This model could lead indirectly to aggression. It is happen trough limiting the contacts of the child with his peers which impede from the development of social intelligence. From here arises the possibility, connected with ignoring the child from the group of peers, which could lead to aggressive behavior.

4. **DEMOCRATISM AND AUTHORITY** In this model the parents take an active part in the life of the child, showing sensitiveness to his needs. They afford an opportunity for the development of the autonomy, as the child has the possibility to take decisions and to express his feelings freely. The relationships are cordial and warm.

5. **PERMISIVENESS** In this model the parents are not punitive, they are acceptive, support the behavior of their child, take decisions in common, and offer explanations for the family rules. The children have the possibility to regulate their behavior by themselves, as the parents could not force them to obey to some absolute moral standards. As a result the children grow as self-confident with well-developed self-control.

It is proved that except the parental models also the marital relationships influence the behaviour and psychological health of the children. It is found that in the children growing in the families where the parents are in conflict increase the neurotic reactions(Коннор,2005).

DEPRESSION IN CHILD AGE

The investigators reached to the agreement that the depression in children and adolescents in phenomenological perspective is similar to the depression in mature

individuals. So the criterion for diagnosis of this disorder in maturity could be used for diagnosing the depression in children. It worth noting several age differences in the symptoms. In particular, in depressive children more often, in the contrast with the mature depressive persons, could be found– aggression and hostility. In this relation is formed the concept of "masked depression", which is connected with not indicative for the depression manifestations as hyperactivity and school problems. The manifested aggression is thought for a "lying behind" depression in children.(Neal,1990)

From the cognitive point of view the depression is described as a dis-order of the perceptions of self, other people and future. The self-scheme of the depressive individuals is unrealistically negative and is distinguished for selective attention to negative events and their personalization, leading to feelings of guilt and unrealistically low self-evaluation. According to the cognitive theory the self-schema is formed in the early childhood experiences. The repetitive, connected with stress family relationships are integrated in the sense of selfhood. In fact the investigations show that the hostility and deprivation of warmth in the family is a condition for the development of the depression in the children.

Psychoanalytic point of view of depression is connected with the idea that the individual is too much concerned to not hurt somebody else. Instead of ex-pressing his anger he directs it to himself and as a result he feels unhappy.

In the context of social theory of learning the depression is connected to the concept of "learned helplessness". This concept is related to the perception of ab-sence of control over the events, which lead to depressive feelings.

AGGRESSION IN CHILD AGE

It is found that the marital conflicts is a main factor in the development of ag-gression. It is proved that the men from aggressive families have higher level of antisocial behavior. The different parental styles also could influence the development of aggression. In the authoritarian style the parents often resort to physical punishment. The physical punishment forms the belief that it is the mean for controlling other people. In the overprotective style there is an external limitation of the contacts of the child which could lead to negligence from the part of the peers which would result in aggression. The democratic style brings about conditions for the development of social competence and an attitude of using of prosocial strategies. The children have high self-evalu-ation and self-control. In the permissive style exists the sense that every kind of behavior is admissible even the hostile one. In the rejective style the chil-dren could not develop self-confidence and social competence as they dem-onstrate antisocial behavior

METHODOLOGY

The purpose of the investigation was to be found what is the influence of the family relationships on aggression and depression in three aspects in relation to: parental models, marital relationships and style of living.

HYPOTHESIS:

1.   It was assumed that the authoritarian and the overprotective model of parenting would lead to aggression in children.
2.   It was assumed that the marital conflicts and the rejective style of parenting would lead to depression in children.

PARTICIPANTS:118 boys and 116 girls at the age of 10.

QUESTIONNERIES:

1.   **PARI /Parental attitude research instrument/** -for investigation of the family relationships. There are 23 dimensions, 8– describe the relation to the family role, 15– relationships between parent and child. This 15 dimensions are divide into 3 groups: 1– optimal emotional contact, 2-emotional distance, 3-the excessive concentration upon the child. (Жил,2005)
2.   **QUESTIONNAIRE** for investigation of the aggression and depression, designed for the pupils of the elementary school(Драголова,2007)

3.PROCESSING OF THE DATA

3.1.REGRESSION ANALYSIS. It was used for investigating the influence of different dimensions on the depression and aggression.
3.2.T-CRITERION OF STUDENT. It was used for measuring the statistical significant differences in relation to the dimensions of the family relationships between the group of children without aggression and depression, and the groups of depressive and aggressive children.

RESULTS

It was found that from our sample 36 boys are aggressive, 30 depressive, 3 show high score at aggressive and depressive scale at the same time; 33 girls are aggressive, 38 depressive, 4 show high scores at aggressive and depressive scale at the same time. It was proved that 49 boys and 41 girls are not aggressive and not depressive at the same time, which we used as groups for comparision with the groups of aggressive and depressive boys and girls.

At the beginning was analysed the different scales of PARI for internal consistence. Traditionally they show high reliability over different populations which was confirmed in our investigation.

1. REGRESSION ANALYSIS

2.1 INFLUENCE OF FAMILY RELATIONSHIPS ON THE AGGRESSION

BOYS

It was found influence on the part of the following dimensions: family conflicts ($\beta=0.34$, $F=5.6$, $p<0.001$), over authority ($\beta=0.45$, $F=8.1$, $p<0.01$), and repression on the aggression($\beta=0.18$, $F=9.2$, $p<0.01$)

GIRLS

It was found influence on the part of the dimension of equal rigths of parent and child ($\beta=0.24$, $F=4.3$, $p<0.05$).

2.2. INFLUENCE OF FAMILY RELATIONSHIPS ON THE DEPRESSION

BOYS

It was found influence on the part of the following dimensions: emotional distance ($\beta=0.25$, $F=11.7$, $p<0.01$) and lack of participation of the father in the family life ($\beta=0.21$, $F=14.5$, $p<0.05$).

GIRLS

It was found influence on the part of the dimension of emotional distance ($\beta=0.34$, $F=12.5$, $p<0=05$)

2. INTERGROUP COMPARISION
2.1.INTERGROUP COMPARISION IN RELATION TO THE AGGRESSION

BOYS

The results show statistically significant difference in relation to the dimensions: family conflicts ($t=5.76$, $p<0.01$), equal rights of parent and child ($t=2.34$, $p<0.05$) and repression on the aggression ($t=2.78$, $p<0.05$) (Fig. 1, 2, 3).
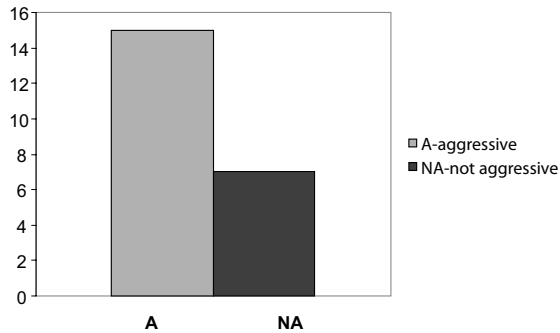
FIGURE 1. MEAN VALUES FOR THE DIMENSION OF FAMILY CONFLICTS FOR THE GROUPS OF AGGRESSIVE AND NOT AGGRESSIVE BOYS
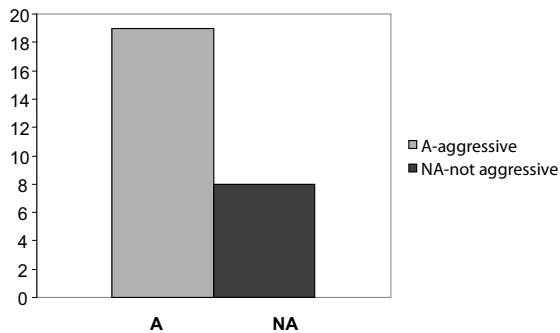
FIGURE 2. MEAN VALUES FOR THE DIMENSION OF REPRESSION ON AGGRESSION FOR THE GROUPS OF AGGRESSIVE AND NOR AGGRESSIVE BOYS
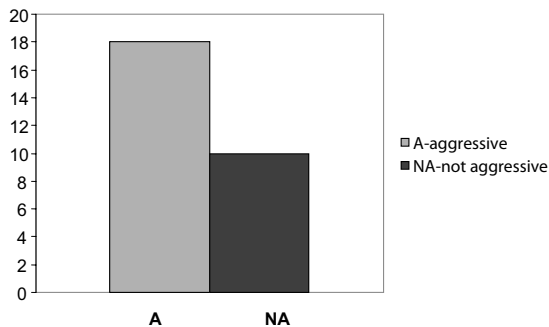
FIGURE 3. MEAN VALUES FOR THE DIMENSION OF EQUAL RIGHTS OF PARENT AND CHILD FOR THE GROUPS OF AGGRESSIVE AND NOT AGGRESSIVE BOYS

GIRLS

The results show statistically significant difference in relation to the dimension : equal rights of parent and child (t=3.63, p<0.01) (Fig. 4).
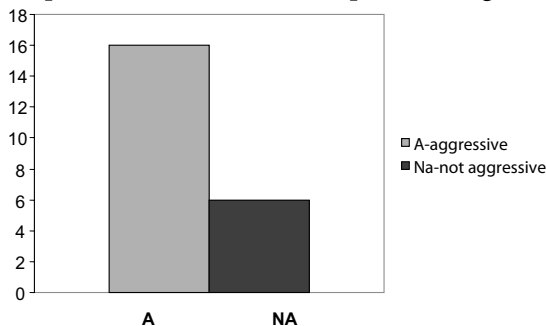
FIGURE 4. MEAN VALUES FOR THE DIMENSION OF EQUAL RIGHTS OF PARENT AND CHILD FOR THE GROUPS OF AGGRESSIVE AND NOR AGGRESSIVE GIRLS

2.2. INTERGOUP COMPARISION IN RELATION TO THE DEPRESSION

BOYS

The results show statistically significant difference in relation to the dimension of emotional distance(t=3.21, p<0.05) .It was found coefficient of t-criterion near to statistically significant difference for the dimension of family conflicts (t=1.96, p<0.05) (Fig. 5).
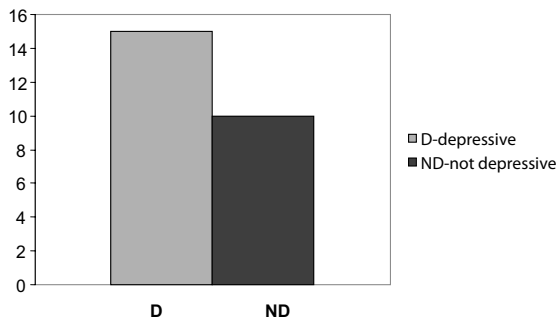
FIGURE 5. MEAN VALUES FOR THE DIMENSION OF EMOTIONAL DISTANCE FOR THE GROUPS OF DEPRESSIVE AND NOT DEPRESSIVE BOYS

GIRLS

The results show statistically significant difference in relation to the dimensions: emotional distance (t=2.67, p<0.05) and family conflicts (t=3.01, p<0.05) (Fig. 6, 7).
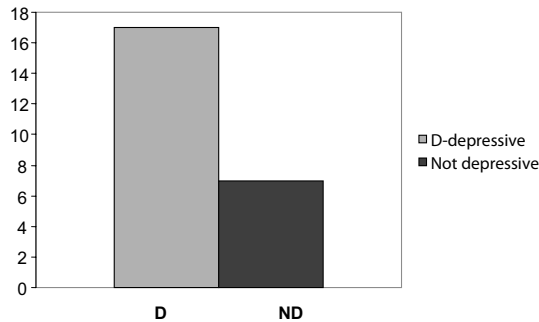
FIGURE 6. MEAN VALUES FOR THE DIMENSION OF EMOTIONAL DISTANCE FOR THE GROUPS OF DEPRESSIVE AND NOT DEPRESSIVE GIRLS
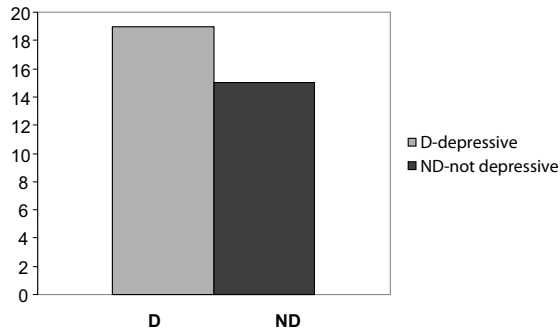
FIGURE 7. MEAN VALUES FOR THE DIMENSION OF THE FAMILY CONFLICTS FOR THE DEPRESSIVE AND NOT DEPRESSIVE GIRLS

DISCUSSION

AGGRESSION

It was confirmed that the authoritarian parental style, which includes compulsion and repression leads to aggression in the sample of boys. It is probably because the boys in their contacts with peers reproduce the model of using force, based on the

belief that it is characteristic of the behavior of the man. The physical punishment forms the conviction that the physical force is a mean of controlling others. Probably for the same reason, it was proved that the family conflicts lead to aggression in boys, as they have, in a contrast with girls, the attitude to internalize the role of the aggressor in the family

It was not confirmed that the overprotection, leading to limited external contacts of the child with his peers, influences on the aggression. Probably because at this age period, preceding the adolescence, the peers and their acceptance or ignoring, is not so important for the individual.

The result showing that the permissive style in the boys as well as in the girls leads to aggression is of interest. It is probably because the unconditional acceptance of any kind of behavior could lead to the belief that everything, even the aggression is permissible. Also at this age the children have the need of control over their behavior, of precise definition of the concepts of good and ill, as they can't regulate their impulses and don't have formed standards.

DEPRESSION

It was confirmed that the emotional distance, connected with the ignoring of the child leads to depression. In the sample of the boys was found that the lack of participation of the father in family life also leads to depression. It is probably because the boys have the need of getting care and support from the figure, on which is based their identity.

The result showing that the family conflicts leads to depression in the girls is of interest. It is probably because they tend, in a contrast with the boys, to internalize the guilt for the family problems. In that relation it would be indicative an investigation of the attribution of the reason (internal/external) for the negative events in the girls and the boys at that age.

The results show that the family conflicts lead to aggression and depression in the boys and to depression in the girls. This result confirms the idea that the aggression, in case in the sample of the aggressive boys, could be based on depression, which is clearly manifested in the samples of the depressive boys and the depressive girls. It would be indicative an investigation devoted to the sex differences at this age in relation to internalizing (in the form of depression) /externalizing (in the form of aggression) of negative experiences.

CONCLUSIONS

This investigation confirms the assumption that family relationships influence aggression and depression in children. Key factor for the development of aggression and depression proved to be-family conflicts .

The investigation has implications for the family consulting practice, connected with the treatment of parental models and relationships in families with aggressive or depressive children.

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THE OPINIONS OF THE HEMODIALYSIS PATIENTS RELATED TO THE CAUSES OF THEIR DISEASE

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Abstract. *Objective: This study was conducted to evaluate the results of the qualitative analysis of the results from the opinions of the hemodialysis patients related to the causes of their disease. Method:The study was performed on totally 383 patients from the private hemodialysis centers within İstanbul. Findings: When the data were examined with respect to their perceiving the cause of their disease, the primary causes of their disease from the perspective of the patients include other diseases such as hypertension, stress and anxiety, hereditary misfortune, overactivity, bad medical care history and decreased immunity. Secondary causes include stress or anxiety, misfortune, inability to reason in any manner and other diseases such as hypertension, overactivity, decreased immunity, aging, dietary habits or nutritional habits and bad medical care history. Tertiary causes include inability to reason in any manner, misfortune, stress or anxiety, bad medical care history, smoking, overactivity, aging, family factors, heritage, microbes and viruses. Conclusions: This study shows that the most important factors affecting the disease are other diseases such as hypertension, stress and anxiety, misfortune, bad medical care history, overactivity, decreased immunity, heritage, dietary or nutritional habits.*

INTRODUCTION

Chronic renal failure is a clinical picture that occurs as a result of impaired renal functions due to progressive loss of nephrons in patients with chronic renal disease and shows sustaining decreased glomerular filtration rate.[1] It is known that dialysis patients have many risk factors. Dialysis is a forcible process for patients since it brings distress, pain and complications that requires undergoing a long medical application three times a week. Besides these, extreme necessity in taking foods and drinks, spending time while coming to dialysis center and returning to home and presence of comorbid diseases such that diabetes and cardiovascular disease may affect the daily course of life and psychosocial life of the patients negatively.[2]

At the same time, the commenting, perception and evaluation of the patients as an individual related with their disease are the determinative components for their sensational and behavioral reactions, their coping style, development of psychosocial distress and psychosocial disorders and life quality.[3] Currently, the domination opinion is that dialysis treatment must be applied with a perspective that aims not only prolonging the life time but also for improving the life quality.[4] This study was conducted to evaluate the results of the qualitative analysis involving the conclusions of the hemodialysis patients related with disease factors.

MATERIAL AND METHOD

This study was conducted involving 383 patients who accepted to participate in private dialysis centers approved by Ethics Committee in İstanbul. Data was collected by questionnaire form including the demographic properties of the patients and a form consisting 18 items involving the dimensions of disease factors in the disease perception scale.

It has been developed by Weinmann[5] in 1996 and renewed by Moss-Morris et al[6] in 2002. The renewed form of the disease perception scale in 23 studies. The disease perception scale composed of three dimensions: Disease type, comments related with disease and disease factors. The dimension of disease factors in the disease perception scale investigates the comments of the individuals about their potential disease factors and it includes four subscales. These are psychological references (ie, stress or anxiety, family problems, personality features), risk factors (ie, hereditary, smoking, alcohol use, aging), immunity (ie, microorganisms or virus, low body immunity), accidental or fortune (ie, accident, injury, bad fortune etc.). The individuals were asked to write three factors that they considered as the most potential reasons for their disease for quantitative.

FINDINGS

The information related with sociodemographic properties of the hemodialysis patients was shown in Table 3. As seen in Table 3.2, when we examined the reasons participant patients referred as the most potential reason for their diseases, of the patients; 3.9% was unable to refer to any reason, 13.8% referred to stress or anxiety, 9.1% referred to hereditary, 2.3% referred to any microorganisms or virus, 2.6% referred to dietary or eating habits, 7.6% referred to misfortune, 6.3% referred to bad medical care history, 1.01% referred to environmental pollution, 1.0% referred to self-behavior, 1.0% referred to self-attitude, 1.0% referred to family problems, 5.5% referred to overwork, 2.1% referred to sensational condition, 2.3% referred to aging, 1.3% referred to alcohol use, 1.0% referred to smoking, 2.3% referred to accident or injury, 0.3% referred to personality features, 3.4% referred to decreased

body immunity and 31.9% referred to exposure to other comorbid diseases such as hypertension. As seen in Table 3.3, with respect to the most potential second reason patients referred for their diseases, of the patients; 14.6% were unable to refer any reason, 15.9% referred to stress or anxiety, 4.4% referred to hereditary, 2.1% referred to any microorganisms or viruses, 6.3% referred dietary or eating habits, 8.4% referred to bad fortune, 5.5% referred to bad medical care history, 1.8% referred to environmental pollution, 2.1% referred to self-behavior, 1.0% referred to self-attitude, 2.9% referred to family problems, 7.8% referred to overwork, 2.6% referred to sensational condition, %3.4 referred to aging, 2.3% referred to alcohol use, 1.6% referred to smoking, 1.3% referred to personality features, 6.0% referred to decreased body immunity and 9.9% referred to exposure to comorbid diseases suchs as hypertension. As seen in Table 3.4, when we considered the most potential third reason participant patients commented for their diseases, of the patients; 40.5% were unable to refer to any reason, 6.8% referred to stres or anxiety, 2.3% referred to hereditary, 1.8% referred to any microorganisms or viruses, 3.7% referred to dietary or bad eating habits, 8.4% referred to bad fortune, 5.7% bad medical care history, 0.8% referred to environmental pollution, 2.3% referred to self-behavior, 0.3% referred to self-attitude, 2.6% referred to family problems, 5.0% referred to overwork, 1.8% referred to sensational condition, 4.7% referred to aging, 1.3% referred to alcohol use, 3.4% referred to smoking, 0.5% referred to accident or injury, 0.3% referred to personality features, 3.4% referred to decreased body immunity and 4.4% referred to exposure to comorbid diseases such as hypertension.

DISCUSSION

This study reveals the comments of the hemodialysis patients related with their disease. When hemodialysis patients were asked the most potential three reasons for their chronic renal failure, as it can be seen in Table 3.2, 3.3 and 3.4, 31.9% patients commented the presence of comorbid disease such as hypertension as the most potential reason, 15.9% patients commented stress as the second most potential reason while 40.5% patients were unable to refer to any reason as the third most potential factor. In the study that Bayraktar conducted with cancer patients, when they were asked their comments related with reason to be a cancer patient, patients considered stress as the most potential reason by 43%, and as the second most potential reason by 15.4% and enviromental pollution as the third most potential reason by 15.4%.[7] In a study that involved patients who had heart attack, it has been seen that stress, high cholesterol level and several risky health behaviors were referred as the most potential reasons.[8]

     In our study, it was seen that the patients considered stress or anxiety, genetic reasons, misfortune, bad medical care history as other primary disease reasons while inability to refer to any reason and presence of comorbid diseases such as

hypertension as secondary disease reasons, and misfortune, stress and anxiety, and bad medical care history as tertiary reasons.

Nadir et al,[9] found hypertension and type II diabetes as a reason for chronic renal failure like our study. Recently, one of the most important points in prevention of renal failure is the necessity of agressive treatment of hypertension and hyperglycemia. Scanning hypertension and diabetes is the best approach to reduce renal failure in recent times.[10] Because undiagnosed hypertension and Type 2 diabetes may reveal due to renal failure. Additionally, the life quality and life time in diabetic patients who receive contionus renal replacement. The primary reasons for mortality are cardiovascular complications. Most of these complications begin to be seen before renal replacement program. According to these observations, renal patients must be diagnosed and started to treat before end-stage renal failure develops.[11]

In our study, the secondary reason is stress or anxiety. It is a known reality that stress triggers many diseases and improves the present diseases. When the effects of stress on the human health were evaluated, most affected organs are kidneys and most common disease is hypertension. Hypertension, diabetes and cardiovascular diseases may improve stress and anxiety of the patient.

Since most of patients have bad or medium socioeconomical condition, their stres condition may be affected and thus it may cause them to refer their diseases to stress and anxiety.

They were unable to determine any reason for their disease. This is probably since they have not efficient information about their disease. In our research, the patients refer to misfortune as a reason for their disease. This may be a result of their religional beliefs.

The perception of persons about events has effects not only on psychological or physiological well-being but also it affects the course of the physical disease. Thus, it will be useful to determine the reasons related with disease to understand better, to control and to treat the psychiatric distress and disorders that may develop in a spesific patient group such as ones with chronic renal failure.

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