Journal Plus Education, ISSN: 1842-077X, E-ISSN (online) 2068 – 1151

Vol VI (2010), No. 1, pp. 56-82

Stress management and defense mechanisms in institutionalised environments

O. D. Moldovan

Olga Domnica Moldovan

"Aurel Vlaicu" University of Arad

Abstract: In the theoretical and experimental work of H.Selye, the theories and concepts about stress and reacting modalities of human persons, have covered the whole gamut of psychological trends, from the psycoanalytic one to the cognitive one. The attitudes of the authors and researchers varied also from an absolute denial of this concept, to its unconditional acceptance and to attributing it an essential part in all the unsolved problems. The author presents her own research about stressed adolescents from natural families and institutionalised adolescents.

Keywords: adolescence, stress, defense mechanisms, coping, stress management, familial environment, residential environment, child protection institution, adjustment to stress.

General theoretical approach

Child protection and the insurance of optimal development conditions for him, is one of the major objectives of the contemporary society. It's not a wonder, if we think that young generations from today, will represent the necessary force for the development of future society, tomorrow. Due to this fact, the entire society is deeply involved in permanent child protection and drawing up laws destined to acknowledge the absolute priority of child welfare. All this aspects were concretised in United Nations' "Convention of Children Rights" in 1989, which was ratified by Romania in September 1990.

For our country, this is one of the most important conditions for entering in European Union: to have a social system of child protection similarly to west-european countries and the drawing up of a law packet which can garantee its application in practice.

The accent fell, especially, on solving the biological needs (food and cover) and very little on education. In these conditions, the child protection institutions did not realised the purpose for which they were created: that to protect and educate the orphans or abandoned children. In many occasions, the implementation of a "rigorous discipline" was made by applying physical punishments or by privation of daily nourishment.

The imprint of these treatments had had severe and longterm results on children. We only mention: the missing of an accurate affection, frequent delays in development, autistic and autoagressive tendencies, and the absence of some proper social abilities for output life for the young people coming from these institutions.

After the Revolution, Romania was confronted with the internal and international public opinion which became aware of the existing situation in orphanages and children houses from our country. This is a consequece of the lower economical situation of many Romanian families, of the increasing of unemployment and inflation, which made many families inable to rise and educate their children and, as a results, to abandon them in different state or private institutions.

In the last years, the services and protection laws for children sensitively improved. It was applied the descentralisation of the institutions' system and the replacement of very big institutions by some smaller like the placement centres and familial type houses, which can garantee a better care and education in a climate, as possible as it could be, similar to that existant in real families.

Taking into account all this things exposed above, the life in an institutionalised environment can become a real chronic source of stress. For adolescents this source comes to add to the others ones specific to age.

The stress was considered, on a good reason, the illness of XX-th century, a great number of researches, data and monographs being registered. The Health Mondial Organisation incriminates stress as being one of the principal causes of the mortality and of a great number of diseases with psychosomatic determination.

From the theoretical and experimental working of H.Selye, the theories and concepts about stress and reacting modalities of human persons, have covered the whole gamut of psychological trends, from

the psycoanalytic one to the cognitive one. The attitudes of the authors and researchers varied also from an absolute denying of this concept, to its unconditioned acceptance and to attribute it an essential part in all the unsolved problems.

The massive assault of informations in all the fields, the using of computers on a larger and larger scale, the internet, contributes not only to the faster currency of knowledges, but also to the creation of new sources of stress.

Stress'problematic became a filed a research by itself, being approached by researchers from most different fields as doctors, psychologists, sociologists, philosophers, economists etc.

The modality to reacting to stress and also the defense mechanisms used by people to protege themselves from o too intense stress or too long, differe from individual to individual and are influenced by the type of stressor agent and by the characteristics of the environment in which take place the stressant situation. The papers reffering to defense mechanisms and to adaptation strategies to stress (coping) are allready thounsands. The definitions and the classification of them have the mark of the school or the orientation to which belong the authors.

The stress is a field of research in which are registred the most numerous scientific papers, published in professional reviews or communicated at national or international congress, conferences or symposium.

This amount of researches, is due, in one hand, to the currency of the phenomenon in all the countries and at all the social levels, and in the other hand to the important consequences which it has on the morbidity, even the mortality, in general population and on the individual capacities to mentain harmonious relationships in society.

The stress doesn't affect only the invidual (psychic, somatic, relational), but also the society, which is submit to increasing economical pressions, to accentuated requirements for assure the social protection of its members.

In this context, is obviously that the researchers try to identify and to delimitate the risk factors and the causes which determine the stressant situations, adapted or non/adapted reactions of people to stress, the modalities of controling and reducing its impact on human person etc.

From the professions with increased risk to stress, at dramatic life situations with important imediate or longterm consequences, from the pressure exerted by minoritar groups, at international conflicts, all this contribute to a significant increase of the stress in the contemporary society.

Moreover, we must put under discussion the extreme and chronic poverty of a great part of the population, the unemployment, drugs abuse, pollution etc. wich contribute each to the multiplication of stress sources and consequences.

The great development of the technic and science, the increasing amount of usefull informations which must be stocked, the perpetual time crisis which is considerate by modern men, the more accentuate isolation of nuclear family in spite of the large one and society, in big metropols, are all factors which contribute to this state of things.

One of the populational categories with higher risk to stress is the adolescents. By their sensible statemind, full of curiosity about all the news, by maintaining the perpetual conflict between generations, by trying all the time to feel new sensations, out of commun, by their desire to affirm themselves and to proeminate, and by their real personality, not yet completed as structure, the adolescents are exposed to numerouse sources of stress. The consequences of that on the personality consolidation, on the values system can be extremely severe, if they do not have understanding, supervising, counselling from heir parents, their teachers or from a specialist in this field.

The problem is more acute in institutionalised adolescents, which do not benefit from a familial care or support, neither by its understanding and affection. The situations to which they are confronted are more or less particular due to the same situation in which they are: the institutionalisation. The defense mechanisms used and the adaptation strategies which are adopted by them can present differences by those of the ordinary adolescents, because of the environmental influences they knew, of the interpersonal relationships established inside the institution, of their previous experience and of the eventually marginalisation in social or school context.

The contemporary society is more and more affected by the impact of stress in cotidian life. The morbidity due to stress increased significantly in the last ten years. More and more somatic illnesses, coronarian diseases and myocardic infarcts are signalated, even in young people, apparently healthy.

This situation is due to more tenssional life conditions, to the pressure of time felt permanently, to the human relationships more tensed in daily life context.

In these conditions, the researchers from all over the world are preoccupied by the methods to fight against and control the consequences of stress. From tea therapy and natural treatments to using the tranquillizers and drugs, from sport activities to religion support, people look permanently for the universal method to treat stress effects.

In order of his personality, the education received, the sociocultural environment to which he belongs, the individual will resort to the method which is considered to be the most appropriate to his particular situation.

As we mentioned before, the informational explosion, the computers and the internet contribute also to create a new source of stress in contemporary society. We must mention, the new psychic illness named "computers' neurosis" appeared in the last years, to the young people who stay days after days in front of their computers, forgeting all others things. In the other hand, the chronic poverty of a great amount of population, the perpetual care of tomorrow-day, the impossibility to face the necessities required by the education and rising of children, the anxiety of unemployment affect also a great number of people, at least, in our country.

Due to the wide-spreading of stress phenomenon, to the so different social levels, the methods that will be used by the individuals to fight against it will have the same variety and will be more controversional.

Some of them propose even "a five days plan to control the stress" (J.Melgosa, 2000). This has an integrative character and has the pretention to include all the human dimensions during an entire day. Each day will be characterised by a "think of the day" which dominate the whole personal activity, from physical exercises, to job related aspects, house aspects, interpersonal relationships and nutrition. Thus, we will have for the five days the following wordings: "I am master of my behavior", "I am master of my thoughts", "Other people reactions depend on me", "Without stress I am healthier", and "I will consider the future with hope". We do not want to deny the author's competence or authority, but we consider unlikely a spectacular reduction of stress (especially of the chronic one) in a so short interval of time as Melgosa sustained. In spite of this, the method enjoy by succes among a large

category of the population. From the scientific methods, besides the chimiotherapic ones, we mention here the most important of them, which are the psychotherapies.

All this aspects determined us to choose as subject to the present Ph.D. Thesis the manifestation of stress in residential adolescents and the modalities used by them for stress management or defense mechanisms.

The objectives of the research

Stress has a great impact on adolescents, whom are, yet, in a period of structurating and consolidating their personality.

The understanding, the help and the support from the family is a necessary condition for them to can affront the stressing situation to which they are confronted. In fact, we can even tell that the adolescence is by itself a period o lifestress due to the multitude of changing which take place in the physic and psychic of young people, by the great amount of social roles which are involved in the new life of children who become adolescents.

Our research started from the following hypothesis:

The defense mechanisms and the stress adaptation strategies used by adolescents have the inprint of the age they have and are different from those used by adults.

- the first hypothesis we made was that adolescents from the placement centres or from the familial type houses usually use defense mechanisms and stress adaptation strategies different from those used by the adolescents from the natural familial environment, who enjoy all the support and understanding need from them to face this difficult period of life;
- we supposed that the lenght of time spent in residential environment influence the defense mechanisms and the strategies of adaptation to stress. In another words, an adolescent who is in a placement centre from the begining of his life will use different defense mechanisms and different strategies to face the stress as an adolescent who spent in this environment a shorter period of time;
- at last, we enounced the hypothesis that there are different defense mechanisms and different strategies to face the stress between boys and girls of this age, not only between institutionalised adolescents and the adolescents who live in their families, but also in the same group of adolescents taken indenpendently.

All this hypothesis, can determine us to considere the necessity of taking into account of some scientific methods for stress management in residential adolescents, used by professional staff with the purpose of reducing the unwanted reactions to stress and of building new strategies and mechanisms more accurate.

The studied samples

The checking of hypothesis enounced above, imposed the choosing of two subjects samples: residential adolescents (from institutional environment) (sample AMI) and adolescents from natural familial environment (sample AMN), between which can be made the necessary comparisons.

The AMI sample, formed by institutionalised adolescents, was made up by 141 young people, living in placement centres and familial type houses from Arad, Santana and Lipova.

The AMN sample – that of adolescents from natural familial environment – was made up by 153 young people from IX-th to XII-th form from the high school in Arad: Grupul Şcolar "Iuliu Maniu", Grupul Şcolar "Aurel Vlaicu" and Grupul Şcolar de Transporturi-Căi Ferate. Were included four IX-th forms, two X-th forms, and one of each XI-th and XII-th forms.

To AMI sample the scales were applied in the afternoon, between the free individual programm, inside of placement centre or familial type house.

The institutionalised group structure is presented in Table 1 and Figure 1.

From the 141 institutionalised subjects, 96 (68, 08%) are boys, and 45 (31, 92%) are girls. The choose and structure of this group was limited by sex and age structure of adolescents beeing in residential system in the moment of the research.

Table 1 Age and sex distribution of AMI subjects (N = 141)

Age Sex	14 years	15 years	16 years	17 years	18 years	19-20 years	Total
M	6	21	24	15	15	15	96
F	15	3	6	12	6	3	45
T	21	24	30	27	21	18	141

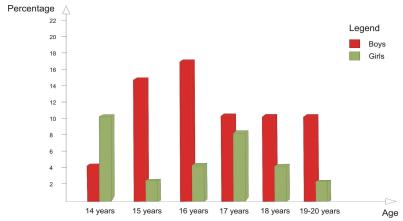


Figure 1 Percentage repartition on sex and age of AMI subjects (N=141).

The subjects' age is between 14 and 20 years old. We couldn't make a repartition in function of schoolform because, differntly from the AMN group where the chronological age corresponds to the schoolage, in this sample we have cases to which the chronological age doesn't correspond to the age required by the school-system. In many cases the school-age is surpassing and we find adolescents of 18 years old in the X-th form. That is way we considered more accurately the repartition on the base of chronological age and not on the form in school.

This is also the raison for larger limits of age in this sample face to AMN group: age limits were included between 14-20 years to AMI sample, towards to 15-18 years to the group from natural families.

To increase the accuracy on the institutionalised adolescents' image we preseted in table 2 the period of institutionalisation in our sample.

Table 2 Institutionalisation period at AMI group (N=141)

Period	Between 1-4 years	Between 5-8 years	Between 9-12	Between 13-16	Between 17 - 20	Total
Number	15	51	27	21	27	141
Percentage	10,63	36,17	19,41	14,89	19,14	100

We can easily observe that more than a half from adolescents spent more than 10 years in residential system (53,37%.). This fact is significant, regarding the abilities formed by this young people, the links with their natural family, the types and variety of interhuman relationships they could establish. We mustn't forget neither the 27 young people (19,14%) whom are in residential system from their birth and spent their entire life in protection institutions.

From them, the only models to refer to were, first, the persons who take care of them, than the teachers and the colegues from the peergroup and eventually the Heros from books or movies saw.

The sample of adolescents who live in their natural families (153 subjects) was coumpoused by pupils with age between 15 and 18 years old from Arad highschools. From the total of 153 subjects 65 (42,49%) were girls and 88 (57,51%) were boys. The sex and age distribution of AMN sample is shown in table 3 and figure 2.

Table 3
Sex and Age distribution of AMN sample (N=153)

Age Sex	15 years	16 years	17 years	18 years	Total
M	42	18	15	13	88
F	29	20	7	9	65
T	71	38	22	22	153

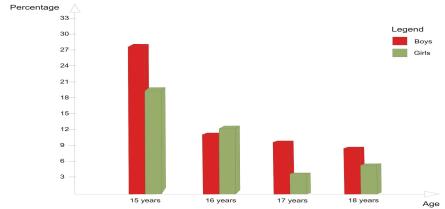


Figure 2 Percentage repartition of sex and age in AMN sample (N=153).

The greater number of boys in this sample (88 boys face to 65 girls) can be explained by the profile of the highschools from which they came and which were included in our research: railway transports and agricol machins, which obviously are more attractive for boys.

For these subjects, the questionnaires were applied in group, in hourschool time, with the colaboration of professors and directors of highschools.

Research methodology

To realise the proposed objectives and to verify the enounced hypothesis were utlised some scales reffering to stress, the perception of stress, the modalities and strategies used for adaptation to stress etc. We used:

- Perceived Stress Questionnaire
- Coping Scale
- Index of Cognitive Resources for Selfreglation to Stress (IRCAS)
 - Scale of Defense Cognitive Mechanisms Evaluation (SEMCA)
 - Inventory of Indivudal Stress Evaluation.

During all the time needed for scales application the subjects were assisted by the examiner. For institutionalised sample took also place a discussion between the examiner and the subjects, for obtaining more informations reffering to the period of institutionalisation, the nature of actual relationships with the natural family (if this one exists), some aspects related to the life in others protection institutions etc. The personal files were consulted to coroborate all the informations needed.

Results and discussions

The obtained data were processed with SPSS-PC 12 program.

As a first evaluation the basic characteristics were established on both samples of subjects and the comparison between averages and its significance was established. Than we made the correlation between the five scales and the variance analysis for AMI sample.

Comparison between institutionalised and natural families' adolescents

The first hypothesis enounced by us was that there are significant differences between defense mechanisms and adaptations strategies used by institutionalised and natural families' adolescents.

The results obtained by the two adolescents' samples at SEMCA are presented in table 4.

Table 4
Averages and standard deviations obtained by the two samples at SEMCA

Statistic index	Average	Standard deviation	Min.val.	Max.val.
AMI Sample	67,33	5,31	51	80
AMN Sample	66,61	6,79	45	87

z = 0.97 p > .05

We can easily observe that the AMI sample's results stretch on a greater interval (42 values) than to AMN sample (29 values). The tendency will be observe in all our study to all the scales. This can be explained by the tendency of institutionalised adolescents of giving answers near the central value, which are considered as neutral, in the aim to not evidentiate themselves to much and not attire attention on them.

The averages of the two samples are situated very near from the ideal average, proving the fact that both samples use the same adaptation non-avoiding strategies. The significance between the two averages is not relevant for this scale.

To look into the analysis of applied scale we made the averages for each of five mechanisms approached by it (denying, repression, projection, rationalizing and intelectualisation) and we try to establish the difference between them, for the two studied samples. The obtained results (Table 5) prove that neither of five mechanisms does present statistically significant averages differences, and we consider that the scale is not so appropriate for our purpose taking into account that it was initially conceived for illness situations.

In spite this, we applied this scale because we considered the ideea that institutionalisation is a "particular illness situation", a kind of "social illness".(fig.3 and 4).

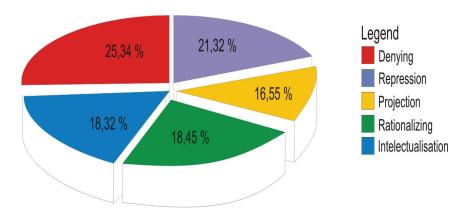


Figure 3 The balanced averages of five defense mechanisms to AMN sample.(N=153)

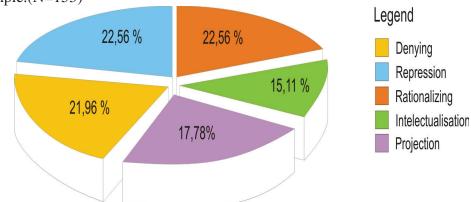


Figure 4 The balanced averages of five defense mechanisms to AMI sample (N= 141)

Table 5 shows the significance of avereges difference to the five defense mechanisms at SEMCA.

Table 5
The significance of averages difference to the five defense mechanisms at SEMCA

	Denying	Repression	Projection	Rationalizing	Intelectua- lization
AMN	15,80	13,29	10,32	11,50	11,42
AMI	14,33	14,72	11,60	14,72	9,86
z values	0,43	0,08	0,19	0,38	0,52
Significance	n.s.	n.s.	n.s.	n.s.	n.s.

The adolescents from natural families prefer as cognitive defense mechanisms the denying and the repression. Those from institutionalised sample use in the first place the denying and rationalizing followed by repression. The use of these mechanisms makes that the stressant situation become more tolerable. But we must not forget that these are only a palliative, because the real problem, which was avoided, further remain and will appear again in another situation. Table 6 shows the statistical index at IRCAS for the two samples.

Table 6
Statistical index for the two samples at IRCAS

Statistical index	Average	Standard deviation	Min.val.	Max.val.
AMI Sample	63,9	4,4	42	99
AMN Sample	72,33	14,10	43	117

z = 5.92 p < .01

The significance of averages difference at IRCAS made us to affirm that the adolescents from natural environment have cognitive defense resources to fight angainst stress better adjust than the institutionalised adolescents. This underlines our hypothesis about the existing differences of defense mechanisms between the residential and natural families' adolescents.

For the Perceived Stress Questionnaire the statistical index and the significance of averages difference are presented in table 7.

Table 7
Statistical index and the significance of averages' difference to
Perceived Stress Questionnaire

Statistical Index	Average	Standard deviation	Min.val.	Max.Val.
AMI Sample	66,93	9,89	48	84
AMN Sample	69,63	7,95	50	91

z = 2.5 p = .01

The both averages samples are included in middle stress category after the classification made by the athors

The adolescents whom live in natural familial environment have percieving stress capacities better than the institutionalised ones. This is due to a lower anchorage in reality of the AMI subjects, by a reduced number of human relationships established by them and by the poverty of previous experiences in life field.

We must take into account the fact that this kind of adolescents live in a so-called "protected environment", in which they are confronted with less general stressing situations and more specific stressant situation due to the particularities of their position (the exclusion in school, the lake of intimacy, the missing of a strong affection feeling etc. Moreover, they have great difficulties in understanding the relation between parents and children or the brotherhood relationships, because of the lake of such elements in their life).

For the Coping Scale we did not obtained statistically significant results. We only mention the item reffering to drug and alcohol abuse which shows that the studied adolescents do not use such strategies to fight against stress.

The Stress Inventory presents the same distribution of data with which we are allready familiar. The statistical index and the significance of averages difference is presented in table 8.

Table 8
The statiscal index and the significance of averages' difference to
Stress Inventory

Statistical Index	m1	m2	Z	р
Iv.Stress.Total	160,57	152,76	2,08	p < 0.03
Style	27,05	25,5	3,11	p < 0.01
Environment	29	26,28	4,77	p <0.01
Symptoms	19,17	19,10	0,11	n.s.
Occupation	24,83	23,79	1,50	n.s.
Relationships	30,41	28,91	2,58	p = 0.01
Personality	29,76	28,01	2,82	p<0.01

There is significant averages' difference not only for the entire inventory, but also for four fields: style, environment, relationships and personality.

Both samples consider in the same way the occupation that they have: to be a student for many of them is not so important and they dissregard the importance of school and learning for their lives. This is a consequence of mas-media and public opinion regarding the possibility to be rich without any education.

The life style and the environment in which the young people live is differentely perceived by the adolescents. Those who live in their families enjoy by a more permissive one, with less restrictions as those required by institutions. Residential adolescents enjoy a correct but cold environment, with the daily problem of their future and life.

The relationships established by the both samples are also different. If, the first are ccharacterised by an easily contact, significant openage, those established by residential adolescents have the mark of the environment in which they grew up.

The balanced percentage averages of the six subscales in general average are illustrated in figure 5 for AMN sample and 6 for AMI sample.

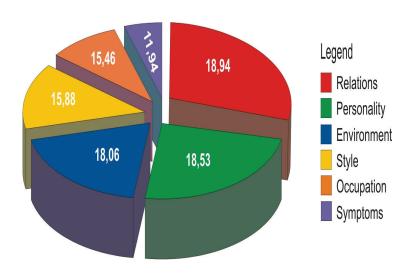


Figure 5 The balanced percentage averages of six subscales of Stress Inventory for

AMN sample (N = 153)

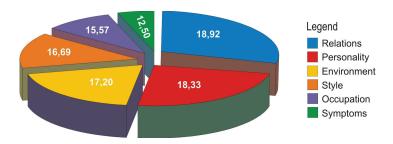


Figure 6 The balanced percentage averages of six subscales of Stress Inventory for

AMI sample (N = 141)

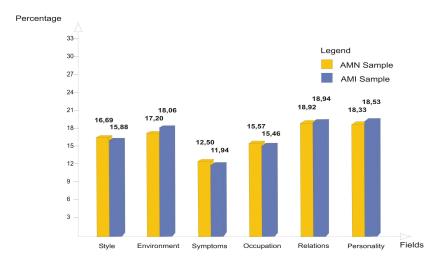


Figure 7 The balanced comparative percentage averages for the two samples at Stress

Inventory

From the graphic representation we can observe that stress is perceived more obvious in three fields: relationships, personality and environment.

At this age the relationships are more easily to establish with those who have the same sex than with the other sex. There is some timidity towards the opposite sex and towards the significance that can get these feelings.

The personality is not yet deffinitively crystalised and the continous worrying of adolescents influence the approach of this field as being stressant. The environment is the mainly field in which the adolescent, dissatisfied all the time, find countless sources of stress.

Comparison in function of the institutionalisation period

The second hypothesis enounced by us was that the period of time spent in institution influence the defense mechanisms and the stress adaptation strategies. To verify this hypothesis we divided the AMI sample in two groups: one including adolescents who spent less than 9 years in institution (AMI-1 with 66 subjects) and the second one who includes adolescents who spent more than 9 years in institution (AMI-2 with 75 subjects). The whole strategy of statistical processing data was taking up for the actual situation.

The only scale to which we enregistred significant averages difference was the Stress Inventory, and also, only in three fields: life style, environment and personality (table 9).

Table 9

The significance of difference averages at Stress Inventory

Statistical Index	m1	m2	Z	р
Iv.Stres.Total	160,40	157,10	1,04	n.s.
Style	27,90	26,5	2,53	p = 0.01
Environment	27,02	28,80	2,19	p = 0.03
Symptoms	19,72	18,80	1,02	n.s.
Occupation	24,95	24,00	0,77	n.s.
Relationships	29,70	30,90	1,42	n.s.
Personality	31,32	28,20	3,90	p<0.01

For AMI-1 adolescents the life style is not entirely changed. Many children have yet presented the influence of previously life-style: 15 children spent less than 4 years in institution. They try to get accustomed to the new program and new environment but in the same time stil are some reminiscences from prevoius life-style. Those who spent in institutions more than 9 years changed completely their life-style and integrated themsemlyes as well as possible to the existant conditions

The personality features are greately influenced by the time spent in institution.Like any institution, the protection child one is based on a very rigurous program and strictely rules which must be respected by the whole community. It is normal to signal the appearance of common personality features more emphasized depending on time spent in institution. The balanced purcentage of averages for the two groups are presented in Figure 8.

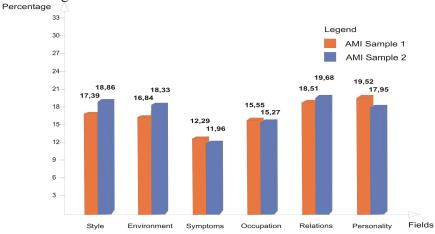


Figure 8 Graphic representation of balanced percentage averages to Stress Inventory by time spent in institution.

For the three others fields (symptoms, occupation and relationships) there are no significant differences. The period of institutionalisation influence nevertheless, by the relationship's quality which can be established and which are strongly determined by the residential environment in which the adolescents live.

Sex comparison of adolescents (AMI and AMN)

The last aspect we treated to verify the enounced hypothesis was the existance of significant differences between the two samples, tanking into account the subject's sex. For this, we divided each sample in two groups AMN-B (88 adolescent boys) and AMN-F (65 adolescent girls) and respectively AMI –B (96 boys) and AMI-F (45 girls).

For AMN sample, even if on the whole scale there are not significant differences, we obtained though this statistical differences between two field: denying and personality.(table10 and figure 9).

Table 10
The significance difference averages for SEMCA
AMN Sample (boys and girls)

Statistical Index	m1	m2	Z	р
SEMCA Total	67,79	66,38	1,28	n.s.
Denying	16,75	14,00	5,09	< 0.01
Repression	15,04	14,68	1,00	n.s.
Projection	10,04	9,85	0,45	n.s.
Rationalization	14,77	14,69	0,15	n.s.
Intelectualization	11,86	11,06	2,50	0.01 <p<0.05< th=""></p<0.05<>

The boys from AMN sample use in a significant greater degree the denying and the intelectualization as defense mechanisms. Defense denying, in the meaning gave by the author "includes all the cognitive proceedings to counteract the forming of an internal representation of the trauma" (Miclea, M., 1997, p. 85). The same author defined the intelectualization as "an ensemble of cognitive strategies which regards the information traumatic analysis in conditions of dissociating it from the emotional consequences" (idem p.92).

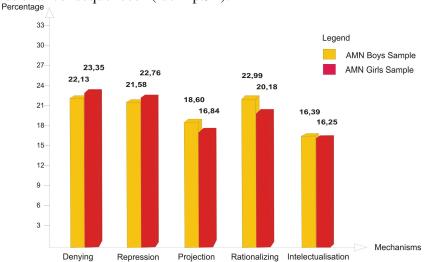


Figure 9 The balanced comparative percentage averages at AMN sample (boys and girls) to SEMCA

The Coping Scale presents also significant differences between boys and girls avereges (Table 11).

Table 11 Statistical index and averages significance at Coping Scale; AMN Sample (boys and girls) $z = 2,59 \ p = 0.01$

Statistical Index	Average	Standard deviation	Min.Val.	Max.Val.
AMN-B Sample	140,52	15,72	95	172
AMN-F Sample	147,20	15,76	114	183

For Perceived Stress Questionnaire there are not significant differences between boys and girls.

The cognitive resources to fight against stress are different in boys' advantage (table 2).

Tabel 12
Statistic Index and averages difference at IRCAS; AMN Sample (boys and girls)

Statistical Index	Average	Standard deviation	Min.Val.	Max. Val.
AMN-B Sample	67,00	13,66	43	117
AMN-F Sample	76,00	13,60	43	111

z = 4.95 p < 0.01

The Stress Evaluation Inventory presents also significant averages difference between girls and boys not only for the whole test but also for three fields of it: symptoms, occupation and relationships (see table 13 and figure 10).

Table 13
The significance of difference averages, AMN Sample (boys and girls)

Statistical Index	m1	m2	Z	р
Iv.Stres.Total	176,31	156,88	7,35	< 0.01
Style	25,70	25,08	0,83	n.s.
Environment	26,78	26,85	0,09	n.s.

Symptoms	21,77	17,28	4,90	< 0.01
Occupation	22,73	25,15	3,14	< 0,01
Relationships	28,13	30,07	2,33	0,01 < p < 0,05
Personality	27,68	28,92	1,49	n.s.

For girls is normal to be more sensible than boys in this period of life and to present more symptoms real or not. Occupation, means in our case the school, and we already treated the attitude of adolescents towards school.

The boys can establish easyer relationships, and in a greater number than the girls, the degree of liberty allowed by parents to the two groupps of our sample is different and the previous experiences accumulated by them are also different.

For the institutionalised adolescents we followed the same algorhythm for data analysis.

Even if as a whole the SEMCA Scale does not present significant averages difference, in a deep analysis we found them on three of the five mechanisms: denying, repression and rationalising (table 14 and figure 12).

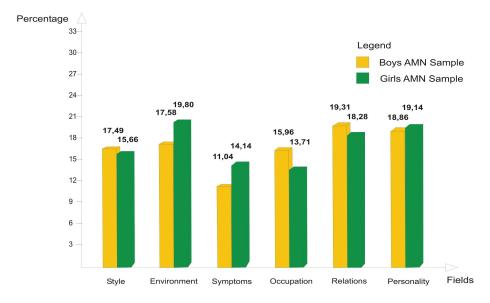


Figure 10 Comparative balanced averages at Stress Inventory AMN Sample – boys and girls

Table 14
Averages significance differences to SEMCA, AMI sample – boys and girls

Statistical Index	m1	m2	Z	р
SEMCA Total	67,46	67,66	0,17	n.s.
Denying	14,93	15,80	2,17	0.01 < p < 0.05
Repression	14,56	15,40	2,27	0,01 < p < 0,05
Projection	10,93	11,40	1,56	n.s.
Rationalising	15,51	13,66	2,17	0,01 < p < 0,05
Intelectualisation	11,06	11,00	0,10	n.s.

Moreover than AMN sample, where the differences were signaled only between denying and rationalizing, at this sample we have also the repression. As Miclea says "repression means all the proceedings which compete to selective reactualisation of the information from the memory, and block the unplaisant traumatic information.

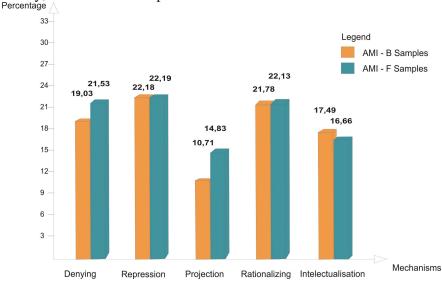


Figure 11 Comparative balanced percentageaverages at SEMCA. AMN Sample-boys/girls.

For girls the traumatic informations linked by the parental separation are allways more negatively perceived and that is why they use more the repression defense mechanisms than the boys. Repression may be conscious or unconscious (for those whom are in institution from a longer period of time).

The Coping Scale, The Perceived Stress Questionnaire and IRCAS do not present statistically significant differences between boys and girls.

Contrasting with this, The Stress Evaluation Inventory is strongly significant not only in the whole but also for five from the its six fields (table 15 and figure 13).

Tabel 15
The significance of averages difference at Stress Inventory,
AMI Sample (boys and girls)

Statistical	m1	m2	Z	р
Index				
Iv.Stress.Total	163,25	153,16	3,49	< 0.01
Style	28,56	24,00	5,42	< 0.01
Environment	28,71	30,33	1,88	n.s.
Symptoms	18,09	21,66	3,92	< 0.01
Occupation	26,06	21,00	4,04	< 0,01
Relationships	31,53	28,00	4,61	< 0,01
Personality	30,80	29,33	4,45	< 0.01

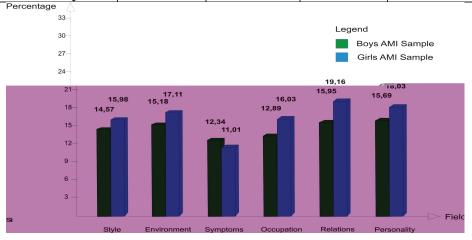


Figure 12 Balanced comparative percentage averages at Stress Inventory (AMI Sample, boys and girls).

Are very significant the results obtained to this inventory. The unsignificant differences at environment can be explained by the fact that for these adolescents the environment is the same. Inside an institution the environment is the same for all the children who are in residence there.

In this environment there are though different styles of life, the two categories presenting different symptoms, they have others attitudes towards school and establish different kinds of relationships with the company.

Some selective conclusions

The longterm institutionalisation put its inprint on normal physical and psychic development of children. Adolescents and the young people who live in institutions are confronted with the absence of adequate social abilities outside the institution, with the missing of comunitar support and with the incapacity to maintain longterm relationships, being in this way desavantaged in the real life environment.

The familial type houses proved their efficacity as an viable alternative to longterm institutionalisation. Child protection remain one of the most important points of Romania integration in European Union.

Stress represents one of the most approached filed of research of XX-th century, due to its conotation of "century illness". The definitions and classifications can be put together in three big categories: physiological, psychological and sociological one. The reactions to stress are determined by the personal particularities, by the nature of stressant situation and by the social context in which it appear.

The research of stress in adolescence period, especially for residential adolescents, is a recently requirement, taking into account the great number of this kind of young people and the difficulties with which they are confronted in their integration in social, familial or professional life.

The hypothesis from which started our research were: the defense mechanism and adaptation strategies to stress of residential adolescvents are different from those of adolescents who live in their natural familial environment; both the defense mechanisms and adaptation strategies are influenced by the institutionalisation period; and there are differences between adolescents due to sex belonging category.

We included in our research two samples of subjects: AMI sample formed by 141 institutionalised adolescents and AMN sample including 153 adolescents living in their natural environment.

The used methodology included five tests: The Evaluation Scale of Cognitive Defense Mechanisms (SEMCA), the Coping Scale, The Perceived Stress Questionnaire, The Inventory of Cognitive Resources against Stress and the Individual Stress Evaluation Inventory.

The adolescents who live in their families use as defensive mechanisms denying and repression tghouth. The residential adolescents use denying, repression and rationalising. The use of these mechanisms makes the situation more tolerable, for a period of time, but the stressor agent remains, and can appear again in other situations. The IRCAS results prove that normal environment adolescents have more specific cognitive resources for defending themselves against stress than the residential ones. The residential adolescents perceive stress situation with more difficulties than the other ones, due to a weak anchorage in reality, to the reduced number of established relationships and to the poverty of their personal previous experience. The Coping Scale does not present significant results.

The Stress Evaluation Inventory has significant averages difference not only as a whole but also in the fields of life style, relationships and the modalities in which they regard the environment and its influence.

To verify the second hypothesis that of differences due to period of time spent in institution we divided the AMI sample in two groups: AMI-1 with 66 adolescents who spent in institution less than 9 years and AMI-2 with 75 adolescents who spent in institutions more than 9 years and even their entire life. The results show that the period of time spent in institutions does not significantly influence the choose of cognitive defense mechanisms. The Stress Inventory proves that AMI-1 sample, have not enntirely change yet the life style previously had, and have some reminiscences from their previous life before entering the institution. Those who spent more than 9 years in residential environment adapted themselves to the new situation as well as they could. The personality features are the more influenced by the period of institutionalisation.

The last hypothesis (if there are differences due to sex appartenance between adolescents) made us to divide our samples in two groups each: AMN-B with 88 boys and AMN-F with 65 girls respectively AMI-B with 96 boys and AMI-F with 45 girls. For AMN samples – the denying and intelectualization are both used in a greater degree by boys than by girls. The two groups use different strategies to fight against stress and make the situation tolerable. The sex differences does not influence the apreciation capacities of a situation as a stressant one, but influence the intensity of perceived stress.

Three of the six fields of Stress Evaluation Inventory present significant results: symptoms, occupation and relationships.

For AMI groups' significant results appear in comparing boys and girls at three fields: denying, repression and rationalising. The strategies used by the boys and girls of residential environment are not significantly different. Many times the same situation is threatening both for boys and girls and their modalities to apreciate a situation as stressant are similar.

The Stress Evaluation Inventory is strongly significant for the differences between residential boys and girls adolescents. In the same environment, the institution, there are different styles of life, different symptoms accused, different points of vue regarding their occupations (school), different modalities to establish relatonships and different personalities.

Stronger correlations were obtained between Stress Evaluation Inventory and Perceived Stress Questionnaire, between SEMCA and Coping Scale and between IRCAS and Stress Perceived Questionnaire.

The results obtained on the two samples and their analysis and interpretation proved the utility of the done research. There are significant differences in stress management between residential and natural familial adolescents as well as between their modalities to perceive stress and to estimate the intensity and the consequences of this.

The practical finality of this research will consist in the establishement of a counseling and psychotherapy centre for the residential adolescents from familial type houses in Santana with the colaboration of Child Protection Direction of Arad

Bibliography

Miller, M. J., (1991), Adolescence *and Authority*, în Meyerson, S. (Ed) Adolescence - The Crises of Adjustment, George Allen & Unwin Ltd., Londra, pp 73-89.

Moldovan, O.D., (2005), *Stress si adolescență*, Editura Universității Aurel Vlaicu, Arad.

Muchielli, A., (1981), Les Mecanismes de defence, PUF, Paris.

Nash, W., (1988), Managing stress, Routledge LTD, Londra

Neidhardt, J., et al (1989), Seis *programas para prevenir y controlar el estres*, Ediciones Deusto, Madrid.

Nills, J. W., (1982), *Coping with Stress. A Guide to Living*, John Wiley & Sons Inc., NewYork.

Paulhan, I., Bourgeois, M., (1995), Stress et coping. Les strategies d ajustement a l adversite, Nodules, PUF, Paris

Pecora, P.J., Whitaker, J.K., Maluccio, A.N., (1992), *The Child Welfare Challenge, Policy, Practice and Research* de Gruyter, New York.

Pervin A. Lawrence, Oliver P. John, (1996), Personality – *Theory and research, John* Wiley & Sons, Inc., New York – London.

Pitariu, H., Albu, M., (1996), Inginerii în contextul tranziției socialpolitice: aspecte ale Stresului ocupoațional în România, accelerația tranzieției, coord. S. Chelcea. D. Bratu, Editura INI, București

Plutchick, L., (1995), *A Theory of Ego Defenses*, în H.R.Conte şi R. Plutchick, în Ego Defenses. Theory and Measurement, John Wiley & Sons, Inc., New-York.

Radu,I, Miclea,M., Albu.M., Nemeş,S., Moldovan,O., Szamoskozi,S., (1993) *Metodologie psihologică și analiza datelor*, Editura Sincron, Cluj-Napoca.

Roquebrune, J. P, (1983), *Como prevenir el estres, agustia y depresion*, Editorial Molino, Barcelona.

Rottenberg, A., (1991), *Creativity in Adolscence*, în Meyerson, S. (Ed) Adolescence - The Crises of Adjustment, George Allen & Unwin Ltd., Londra, pp 415-433.

Selye, H., (1985), Selye's Guide to Stress Research, Scientific & Academic Edition, New York.

Sillamy, N., (1980), Dictionnaire *Encyclopedique de psychologie*, Ed. Bordas, Paris.

Sivadon, P.,(1973), *Traite de psychologie medicale*, vol. 1, P.U.F. Paris. Vaillant, E., (1992), *Ego Mechanisms of Defense*, American Psychiatric Press, Washington.

Weiss, J. M., (1993), *Psychological Factors in Stress and Desease*, în Scientific American nr. 26, pp 104-113.

Weissman, M. M., Markovitz, J. K., (1994), *Interpersonal Psychotherapy*, *Current Status*, în Archives of General Psychiatry, nr. 51, pp 599-606.

Widiger, P. A., (1993), *The DSM-III-R Catgorical Personality Disorder Diagnoses*, în Psychological Inquiry, nr. 4, pp 75-90.

Wills, Th., Sandy, J.M., (2001), Family Risk Factors and Adolescence Substance Use, A.P.A. Journal Developmental Psychology, May, vol. 37, nr. 3, pp 283-297.