# BABEŞ-BOLYAI UNIVERSITY FACULTY OF PSYCHOLOGY AND EDUCATIONAL SCIENCES

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# RATIONAL –EMOTIVE AND BEHAVIORAL EDUCATION FOR TEACHERS

- Dissertation summary -

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**KEY WORDS:** emotional distress, irrational beliefs, inferences, disfunctional behaviors, rationale emotive education, cognitive factors, rational emotive education for teachers

#### The Actuality and Importance of the Approached Subject

One of the applications of rational emotive and behavior therapy is constituted by rational emotive and behavior education, the latter having a philosophy identical to that of therapy. It is a mental health program whose major purpose is the development of some habits of rational thinking in case of pupils and their empowerment in using these habits in everyday life. The programs developed by Knaus (1974), Vernon (1989, 1998) and Bernard (1987) have been used worldwide in schools and have proved their efficiency (Hooper & Layne, 1985; Trip, 2006; Bernard, 2008). Ellis, Vernon, Morris and Wolfe (2006) considered that the future of rational emotive and behavior therapy would be represented by the prevention programs used in school environment (for pupils, for teaching staff or even for parents), this being one of our motivation regarding the choice of the research subject.

Teachers' mental health has a great impact in the educational act. The emotional distress experienced by teachers leads to dysfunctional behaviors in relation to the pupils, colleagues and teaching activity. The direct consequences of teachers' emotional distress are the dysfunctional relationships with their pupils and colleagues, non-involvement in curricular and extracurricular activities, absenteeism, superficiality in completing the work tasks, procrastination. The aim of the rational emotive and behavior education for teachers is represented by the modifications of irrational beliefs and, implicitly, by the modifications of dysfunctional emotions and behaviors. Teachers' behavior can influence negatively the behavior of pupils. The research studies fulfilled in this field are very few and have shown the specific of the irrational beliefs in case of teachers, but also modalities of intervention. Nucci (2002) proved the effectiveness of implementing this type of educational programs in case of students in educational field, with the purpose of personal and professional development. Authoritarian attitudes (demadingness towards others, more specifically towards the pupils) are not consistent with the direction of pupil-oriented education. The authoritarian teacher focuses on controlling pupil, the latter not being offered the freedom of expression, of trying out the critical thinking, for which reason we have decided to approach this subject. In our teaching experience, of almost five years, we have met many teachers who decided to attend courses of professional development in the field of Psychology or Psychology of Education in order to be as efficient as possible in their activity involving pupils, to cope with the latter's disruptive behaviors, but also to manage their own negative emotions experienced in their professional life. This observation has represented another reason for starting this scientific paper.

The current paper analyzes the cognitive aspects of teacher's distress from rational emotive and behavior perspective, as well as the implementation of a rational emotive and behavior education program for this professional category.

Rational emotive and behavior therapy was devised by Albert Ellis (1962) and has several principles at its basis (David, 2006): the belief is the most important determinant of affective-emotional, cognitive, behavioral reactions, as well as of some psycho-physiological responses; a great part of psychopathology is the result of dysfunctional and/or irrational beliefs; the dysfunctional and/or irrational beliefs can be identified and changed; the change is made by cognitive and/or behavioral techniques; in cognitive-behavioral approach, both the theories and the intervention procedures/sets have to be scientifically validated.

The evaluative beliefs are considered as factors of general vulnerability, being involved in the personality structures of the subject and in their life philosophy. These beliefs are rational and irrational. They are logically inconsistent, cannot be sustained by proofs, are absolutist and dogmatic, are expressed by requests and not by wishes, lead to disturbing emotions and do not help us reaching our aims (David, 2006). The central irrational belief is the inflexible, absolutistic thinking from which other three general intermediate irrational beliefs derive: awfulizing, low frustration tolerance and self-downing/global rating.

Being rational does not imply lacking in emotions. Even though when we think rationally we may feel intense negative emotions. The distinction between the emotional consequences of rational and irrational thinking is made in: frequency, intensity and duration of negative emotions and not in their absence or presence. The functionality/dysfunctionality of emotions is given by the subjective experience, joint beliefs and their consequences. Negative functional emotions (worry, sadness, anger, remorsefulness, regret, disappointment) reflect the presence of a subjective negative experience, of rational beliefs, as well as of some adaptive behavioral consequences. The negative dysfunctional emotions (anxiety, depression, guilt, anger, shame) indicate the presence of subjective negative experience, of irrational beliefs, and of some disadaptive behavioral consequences.

The model that lies at the basis of the rational emotive and behavior therapy is the ABCDE model (Ellis, 1994 apud David, 2006), where:

- A (activating event) is the activating event which, usually, stands for our perception upon the problem we have to face. This may be of "external situation" type (life events) or of "internal situation" type (emotions, psycho-physiological aspects, behaviors);
- B (beliefs) represents the person's beliefs. They interpose between the activating event and the emotional, behavioral or psycho-physiological consequences. These beliefs mediate the perception and the representation of the activating event in the individual's mind;
- C (consequences) represents the consequences of the cognitive perception of the activating event. These consequences can be emotional, behavioral or psycho-physiological. They constitute the uncomfortable mood the client finds in.
- D (disputing) represents the irrational beliefs restructuring;
- E (effective) signifies the assimilation of some new efficient, rational beliefs, a new life philosophy.

Cognitive restructuring presupposes the use of some specific techniques by which the individual is helped to point out the unrealistic, non-empirical and irrational aspects of their thinking. The techniques used in this respect are the following: the logical techniques, which have rationalism as foundation (How can you justify this?); the empirical techniques, which presuppose the checking of the validity of thinking (What do you ground on when you say that?); the pragmatic techniques (How is thinking help you?); the metaphorical techniques, which use metaphors from literature, proverbs, songs, poems, stories etc. and the spiritual techniques. The cognitive restructuring is then followed by the changing of irrational beliefs into more rational ones.

The validity of this theory is supported by empirical studies, the researches displaying the impact of irrational beliefs on the emotional distress (dysfunctional negative emotions) (Möller, Nortje & Helders, 1998; David, Schnur & Belloiu, 2002; Jones and Trower, 2004; Macavei and Miclea, 2008).

Regarding the future of this form of therapy, in 2006 nine of the members of the Institute for Rational-Emotive Therapy's International Training Standards and Review Committee made some predictions: it would be as effective as it was (Ellis), it would maintain its contribution concerning the low frustration tolerance (Bernard, DiGiuseppe), it would constitute an educational program in mental health (Vernon, Morris, Wolfe), especially in the school environment.

# The Application of Rational Emotive and Behavior Therapy in School Environment – Rational Emotive and Behavior Education

The rational emotive and behavior education is an extension of the rational emotive and behavior therapy, the therapy itself being an educational process. Knaus (2004) mentioned about the rational emotive and behavior education as being a positive and preventive psychological education program. Vernon (1990) defined rational emotive and behavior education as being a systemic curricular approach in which the pupils attends the planned lessons.

Rational emotive and behavior therapy was first applied in school (in a pupils class) in 1969. That time, "The Living School" belonging to Albert Ellis Institute from New York was founded. "The Living School" was conceived as a private school which integrated the elements of rational emotive and behavior therapy within the academic curriculum. Those who conveyed the concepts of rational emotive and behavior therapy to the children were the teachers who were teaching the pupils, not the psychologists or the social workers.

The rational emotive and behavior education is based on the assumption according to which it is possible and desirable to teach children the way in which they can help themselves in order to cope more efficiently with life (Vernon, 2004). By this program, the children assimilate the necessary habits for preventing the emotional disorders, more specifically habits of rational thinking, a healthy concept about self and others. The rational emotive and behavior education does not regard pathology, but it is a positive program of mental health (Knaus, 1974).

The rational emotive and behavior education essential programs are those devised by William Knaus (1974) - Rational Emotive Education: A Manual for Elementary School Teachers, Vernon (1989, 1998) - Thinking, Feeling, Behaving and The Passport Programme. A Journey through Emotional, Social, Cognitive and Self-Development. Grades 1-5/6-8/9-12 and Michael Bernard (1987) - You Can Do It! Education.

#### Research in the Field of Rational Emotive and Behavior Education

The rational emotive and behavior education came into the area of experts' preoccupations even though the research in the field was not so prolific in comparison with that of the rational emotive and behavior therapy. The current studies regard the effectiveness of these programs.

The first research works in the field of the rational emotive and behavior education were made by Ellis (1970), who published an article in "Educational Technology", entitled *An Experiment in Emotional Education*. In 1972, he published another two articles - *Emotional Education in the Classroom: The Living School* and *The Contribution of Psychotherapy to School Psychology*. In the first article, he described the applications of rational emotive therapy in education. In the second article, he presented six of the methods used in the rational emotive education within the project "Living School". In 1973 (apud Watter, 1988), another article by Ellis was issued: *Emotional Education at the Living School*, published in the book entitled *Counseling Children in Groups*, edited by Ohlsen.

The studies have emphasized the effectiveness of rational emotive and behavior education in modifying irrationality or inferences (Hooper and Layne, 1985; Wilde, 1996; Popa, 2004), irrationality and emotional problems (DiGiuseppe and Kassinove, 1976; Miller and Kassinove, 1978; Leaf, Gross, Todres, Marcus and Bradford, 1986; Morris, 1993; Bernard, 2008), the academic performance, absenteeism and disruptive behavior (Block, 1978), the locus of control and self-concept (Omizio, Cubberly and Omizio, 1985; Laconte, Shaw and Dunn, 1993), the self-esteem, emotional distress, depression and satisfaction in life (Leaf, Krauss, Dantzig and Arlington, 1992), the irrationality, inferences, the dysfunctional emotional and behavior problems (Trip, 2007).

#### **Teachers Emotional Distress**

Teachers' stress has been defined as a negative response or affect accompanied by potentially dysfunctional psychological changes. This results from aspects of profession and is mediated by the perception according to which the requirements of the profession represent a menace and by the coping strategies used for diminishing the threat (Kyriacou and Sutcliffe, 1978). Identified as a problem, first in the 30s (Hicks, 1933), the teachers' stress has continued to be even nowadays a difficulty for teachers, pupils and professional environment. The emotional distress may affect work satisfaction, teachers' efficiency in schooling activities, their relations to pupils and school, their own or their families' wellness or the school as an organization.

The research work in the field of teachers' emotional distress has had as aims the identification of the stressors the teachers confront with, of the individual characteristics that contribute to the stress triggering, as well as of coping strategies associated with teachers' stress. Another research direction is represented by the devising and assessment of the effectiveness of .

According to ABC model (the rational emotive and behavior therapy), the sources of emotional distress (the stressors) represent the activating event (A). In 2001, Kyriacou completed an analysis of the research studies in this field. The main stress sources identified by the previous research studies are: the unmotivated pupils, maintaining order during classes, time pressure and curricular and extracurricular tasks, adapting to the changes occurring in the educational system, the assessment made by the others, problems with colleagues, the self-esteem and the status, the school administration, the role conflict and role ambiguity, the improper working conditions. But all these sources of stress are distinct for each teacher individually, and the intensity of the emotional distress depends on the complex interaction between the teacher's personality, values, abilities and the specific situations they confront with. Harris, Halpin and Halpin (1985) emphasized the association between the authoritarian attitudes (orientation towards controlling pupils) and high levels of stress. Soh (1986) underlined the connection between the locus of control and stress, the teachers with an internal locus of control experiencing lower levels of stress connected to pupils' behaviors and global stress. Tuettemann and Punch (1993) highlighted the fact that the degree to which the teachers perceive themselves as being competent (the extent to which they make or they do not rate themselves according only to their performances), the colleagues support, the autonomy and recognition represent main factors in improvement or prevention of distress.

Kyriacou (2001) stated that the coping strategies used by the teachers in order to deal with the stress are: avoidance of confrontations, relaxation after working hours, control of emotions, spending time for particular tasks, discussing the problems and expressing emotions, a healthy lifestyle, planning and establishing priorities and awareness of own limits.

#### **Teachers' Specific Irrational Beliefs**

According to rational emotive and behavioral theory, the emotional distress is a consequence of the evaluations the individual makes regarding the events they confront with. These evaluations are accomplished by the help of irrational beliefs. Over the last two decades, teachers' emotional distress was conceptualized and studied in accordance with the principles of rational emotive and behavioral theory. The research in the field analyzed the connection between the teachers' irrational beliefs and the emotional distress (Moracco and McFadden, 1981; Bernard, Joyce and Rosewarne, 1983; Forman, 1990, Zingler and Anderson, 1990; Bermejo-Toro and Prieto Ursua, 2006), as well as the cognitive-behavioral interventions meant to diminish teachers' distress (Bernard, 1990; Forman, 1990).

Bernard and Joyce (1984) reviewed teachers' major irrational beliefs that contribute to their emotional distress: I must constantly receive pupils', teachers', administration's and parents' approval;

The events during the class have to occur exactly as I want them to occur; Schools have to be just; Pupils should not be frustrated; The pupils that are not properly behaving have to be severely punished; There shouldn't be any kind of discomfort or frustration at school; Teachers have always needed a lot of help from the others to solve problems connected to school; Those who are not managing well at school are not worthy; Pupils having behavioral and learning problems history will always have problems; Pupils or other teachers can make me feel bad; I cannot stand seeing children who have an unhappy family life; I must have total control over the class all the time; I must find the perfect solution for all problems; When children have problems the fault belongs to their parents; I must be a perfect teacher and I mustn't ever make errors; It is easier to avoid problems in school than face them.

Wilde (1996) states that the teachers' irrationality focuses on self-downing ("I'm awful"), demandingness ("Children have to be different, more obedient"), and catastrophizing ("Things are awful"). Many teachers believe that they have to have a total control over the class they teach; otherwise they are not good teachers. Additionally, some associate their value as persons with their performance as teachers, which leads much more towards emotional distress: "I have to be perfect all the time", "If I fail as a teacher, I fail in life", "I have to gain pupils' respect", "If things go wrong it is my fault and this shows how unworthy I am", "If the principal knew what was happening during the class, I would be dismissed". The teachers who tend to get angry and be hostile are those teachers who show demandingness towards the pupils: "Pupils do not have any right to behave like that", "Pupils should be more respectful", "I should not be provoked", "Pupils who are behaving improperly are bad". The difficulties related to the teachers' anxiety are determined by the catastrophic perspective which teachers have over the events: "The way the pupils behave is terrible", "It is very difficult for me to do this", "It is horrible when the pupils do not want to do what I tell them to", 'The way our principal treats us is horrible", 'I cannot stand these pupils".

#### **Intervention Programs in Teachers' Emotional Distress**

Although the rational emotive and behavioral therapy provides a coherent conceptual framework in order to help teachers cope with the stress related to pupils' disobedience, there are very few studies which use rational emotive and behavioral therapy or rational emotive and behavioral education in reducing stress, modifying teachers' irrational beliefs, emotions and dysfunctional behaviors. Cognitive-behavioral programs focus on irrational beliefs (Forman and Forman, 1980; Cecil and Forman, 1988; Jesus and Conboy, 2001). The results of these studies showed a decrease in teachers' irrationality and distress, but there were not any changes in the behavior approached in class (praise, critics). Another category of studies refers to the programs that regard the management of stressors (Reglin and Reitzammer, 1998; Nagel and Brown, 2003).

The Teacher Irrational Belief Scale has been validated on Romanian population. The scale was developed by Michael Bernard (1988) and it's a measure for the irrational beliefs of teachers. EFA and

PA have been carried out and the model was examined through CA. Also, convergent validity and reliability were checked. The solutions found were similar to those found by the author. In our case, two of the initial subscales (authoritarianism and demand for justice ) have been merged into one (demandingness toward others).

#### **Cognitive Factors Involved in Teachers' Emotional Distress**

#### **Objectives**

The objective of the present study is represented by the investigation of cognitive factors involved in the teachers' emotional distress and the prefiguration of teachers' distress model. The research is grounded on the rational emotive and behavioral theory upon distress (Ellis, 1962).

#### **Hypothesis**

The irrational beliefs, locus of control and attributional style contribute to generating teachers' emotional distress.

Design: correlational

#### Method

#### **Participants**

The current research has brought up together 149 (38 man and 111 women) participants, teachers from Bihor county, from primary education (18 participants, 12.1%), gymnasium (32 participants, 21.5%) and high school (99 participants, 66.4%).

#### Measures

TIBS- Teacher Irrational Belief Scale (Bernard, 1988) – measures the irrational beliefs of teachers. The scale contains 20 items and three subscales: Low Frustration Tolerance, Self-Downing and Demandingness Toward Others.

Adult Nowicki-Strickland Internal-External Control Scale devised by Nowicki and Strickland in 1974 for assessing the locus of control as a generalized expectation of control, having two poles: internal and external. The scale comprises 40 items, the variants of answer being YES or NO. Fidelity: The value of α Cronbach coefficient, of .74, is adequate (N=149, Romanian population).

Attributional Style Questionnaire (ASQ) - was developed by Peterson, Semmel, von Baeyer, Abramson, Metalsky and Seligman in 1982 (Marian, 2002) having as purpose the assessment of the stable tendency to make causal attributions or inferences which are assumed to play a major role in depression. Fidelity: α Cronbach coefficients obtained for the Romanian population for the every dimension of the questionnaire vary between .61 for negative use, .64 for global positive, .67 for stable negative, .70 for stable positive, .72 for internal positive, .77 for global negative, .77 for hope, .78 for negative composite score, .80 for total score, .82 for negative composite score, .83 for despondency (Marian, 2002).

Profile of Mood State (POMS) - was conceived by McNair, Lorr and Droppleman (1981, apud Marian, 2007) for measuring the psychological distress in the clinical practice in case of hospitalized psychiatric patients, somatic and healthy ones. In the current research study, 28 items were extracted from the 47 items form, and were grouped into seven subscales: functional negative emotions from sadness/depression category (5 items): sad, distressful, melancholic, unhappy, upset; dysfunctional negative emotions from sadness/depression category (7 items): useless, depressed, helpless, hopeless, depressive, sorrowful, discouraged; functional negative emotions from worry/anxiety category (4 items): concerned, worried, restless, hassled; functional negative emotions from worry/anxiety category (4 items): anxious, irritated, fearful, frightened; functional negative emotions (sadness/depression and worry/anxiety categories) (9 items): functional negative emotions (sadness/depression and worry/anxiety categories) (11 items). Fidelity: Internal consistency coefficients vary between .66 (worry), .68 (anxiety), .84 (functional emotions), .85 (sadness), .88 (depression), .89 (dysfunctional emotions), .92 (distress). The sample group consisted in 189 teachers (43 men, 146 women) from Bihor county. The participants have the age varying between 22 and 64, the average age being 38.48.

#### Dysfunctional behaviors scale

The scale has the form of a behavior grid and regards 21 dysfunctional behaviors. The subjects were asked to evaluate on a Lickert scale of 4 points how often they expressed the behaviors over the last month. On a sample of 137 teachers (35 men and 102 women), an internal consistency coefficient of .78 may be obtained.

#### **Procedure**

All participants completed all the five measures. The application of all questionnaires was completed within school, the school psychologist mediating the relation between the researcher and the participants.

#### Results and their interpretation

In the first stage of our study, we approached the path analysis for checking the causal model. Four latent variables were taken into consideration: three independent variables (irrationality, control and attributional style) and a dependent variable (the emotional distress). The attributional style  $\rightarrow$  distress path was not statistically significant ( $\beta$ =-.04, p=.597), therefore, it was removed from the model, the attributional style not being a predictor for teachers' emotional distress. Irrationality  $\rightarrow$  distress path ( $\beta$ =.37, p=.000) and control  $\rightarrow$  distress ( $\beta$ =.23, p=.006) path proved to be statistically significant.

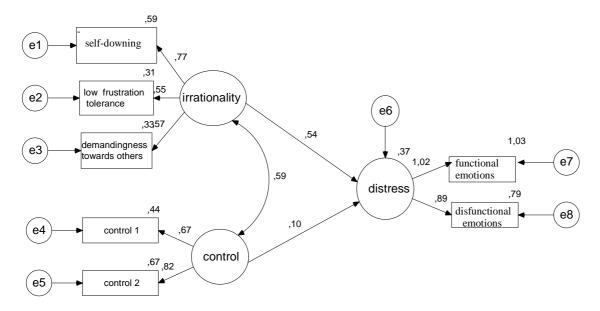


Figure 1. Path diagram of the initially proposed model for the cognitive factors (irrationality, control) influence on the emotional distress (standardized path coefficients are represented) after removing the attributional style variable.

The analysis of the structural equation indicates that the model we have proposed for the influence of cognitive factors on the emotional distress is adequate ( $\chi^2$  normalized < 3, SRMR<.085, GFI>.80, CFI>.85, RMSEA<.08).

Analyzing the standardized coefficients annexed to the model ( $\beta$ =.105, p<.05), we observe that the Control dimension does not have a direct influence on the emotional distress. The value of r<sup>2</sup>=.37 indicates that the two variables explain 37% of the variation of distress. Such a value indicates a good explanatory power within social sciences (Sava, 2004). In the initial analysis (path analysis), the control dimension constituted a predictor, and the model postulated by us, comprising the irrational beliefs and control factors, was an adequate one, which led us to the hypothesis of irrationality mediating the control influence on the emotional distress, hypothesis that was to be verified further on. Also, we would verify the extent to which the specific irrational beliefs mediated this relation. For this purpose, the Soebel syntax was used.

In our case, the locus of control is the independent variable, the emotional distress is the dependent variable, and the mediating variable is represented, in line, by irrationality, self-downing, demandingness towards others and low frustration tolerance. The correlation coefficients between irrationality (r=0.47, p<.01), self-downing (r=0.43, p<.01), demandingness towards others (r=0.35, p<.01), low frustration tolerance (r=0.43, p<.01) and the emotional distress, as well as those between control and emotional distress (r=.39, p<.01) have revealed a positive connection between them. Also, the regression coefficients have shown the fact that these cognitive factors, irrationality ( $\beta$ =.37, p<.01), self-downing ( $\beta$ =.32, p<.01), demandingness towards others ( $\beta$ =.35, p<.01), low frustration tolerance ( $\beta$ =.32, p<.01) and control ( $\beta$ =.24, p<.01) are predictors for teachers' emotional distress.

Table 1. The mediating effect of irrationality within the relation between control and emotional distress

Direct and total effect								
	Coefficients	s.e.	t	p				
b(YX)	1.034	.201	5.141	.000				
b(MX)	.691	.130	5.311	.000				
b(YM.X)	.571	.119	4.808	.000				
b(YX.M)	.639	.205	3.122	.002				
Soebel tes	t							
Value	s.e.	95%	•	Z	p			
.395	.112	.176	.614	3.530	.000			

Table 2. The mediating effect of self-downing within the relation between control and emotional distress

Direct and total effect								
	Coefficients	s.e.	t	p				
b(YX)	1.033	.201	5.141	.000				
b(MX)	.363	.063	5.773	.000				
b(YM.X)	1.004	.251	4.006	.000				
b(YX.M)	.668	.212	3.151	.002				
Soebel tes	t							
Value	s.e.	95%	•	Z	p			
.365	.112	.146	.585	3.259	.000			

The results indicate the fact that the relation between the locus of control and the emotional distress is totally mediated by irrationality (z=3,53, p<.001 – Table 1.), self-downing (z=3.26, p<.001 – Table 2.), demandingness towards others (z=2.06, p<.05 – Table 3.) and low frustration tolerance (z=2.10, p<.04 – Table 4.). Therefore, the locus of control leads to emotional distress only the individual endorse irrational beliefs: self-downing (I think I am not a good teacher when I do not receive approval or respect for what I do), demandingness towards others (Pupils should always be polite, have consideration towards teachers and behave adequately) and low frustration tolerance (I should not work so much).

Tabel 3. The mediating effect of demandingness towards others within the relation between locus of control and emotional distress

Direct and total effect								
	Coefficients	s.e.	t	p				
b(YX)	1.033	.201	5.141	.000				
b(MX)	.134	.053	2.554	.012				
b(YM.X)	1.128	.302	3.735	.000				
b(YX.M)	.882	.197	4.478	.000				
Soebel Tes	st							
Value	s.e.	95%		Z	p			
.152	.074	.007	.296	2.058	.040			

Tabel 4. The mediating effect of low frustration tolerance within the relation between locus of control and emotional distress

Direct and total effect								
	Coefficients	s.e.	t	p				
b(YX)	1.033	.201	5.141	.000				
b(MX)	.193	.057	3.403	.006				
b(YM.X)	.795	.285	2.786	.000				
b(YX.M)	.880	.204	4.310	.000				
Soebel Tes	st							
Value	s.e.	95%		Z	p			
.154	.073	.010	.297	2.102	.036			

#### **Discussions**

The results obtained in the current study are in accordance with the previous researches which regarded the emotional distress of the general population, as well as that specific to teachers. Irrationality, as well as the specific irrational beliefs (self-downing, demandingness towards others and low frustration tolerance) represent an important predictor of teachers' emotional distress, these mediating the influence of inferences (locus of control).

The role of informational processing in producing distress was analyzed within a series of studies. Morraco and McFadden (1981) emphasized the role of cognitive factors, more particularly of teachers' attitude towards stressors, in producing emotional distress. Tuettemann and Punch (1993) outlined the fact that the way in which teachers perceive themselves or assess their activity may contribute to increasing or ameliorating the emotional distress. Bremejo-Toro and Preito-Ursua (2006) pointed out the connection between high level of irrationality and that of the emotional distress. Teachers with low frustration tolerance have high levels of burn-out and depressive emotions. Also, teachers with authoritarian attitudes towards pupils have a higher level of distress.

Though certain studies revealed the strong connection between the inferences (attributions, inferences, locus of control) and the individual's emotional mood (Schachter and Singer, 1962; Harris, Haplin and Haplin, 1985), more recent tendencies in cognitive psychology have demonstrated the fact that these lead to emotional distress because they contribute to or activate the evaluations made by the individual in specific situations (David and McMahon, 2001). These evaluations mediate the relations between the inferences and the emotional distress (Szentagotai and Freeman, 2007).

Controlling stressors (activating events) is a rather difficult challenge to accomplish as society is in continuous change. The flexible thinking, frustration tolerance, non-catastrophizing and situational assessment represent the most efficient way in ameliorating the emotional distress. That is why, in devising the program meant to manage teachers' emotional distress, the intervention has to be focused on changing the rigid, absolutistic thinking, the low frustration tolerance and the global rating (of the self, of others and of world, generally).

### The Effectiveness of a Rational Emotive Education Program for Teachers Objectives

The objective of the current study is to establish the extent to which a program of rational emotive and behavior education for teachers contribute to ameliorating their emotional distress by modifying the irrational beliefs and inferences.

#### **Hypotheses**

The rational emotive and behavior education program is effective in modifying the inferences and evaluative beliefs, of emotional distress and of dysfunctional behaviors of teachers.

Mixed research design (pretest-posttests-follow-up, pretest-posttest with control group).

#### Method

#### **Participants**

The current research brought up together 40 participants, teachers from Bihor county. The attendance at the study was voluntary, on the basis of a prior agreement informing about the aim of this research. The experimental group was made up of 20 teachers (3 men and 17 women) from I-VIII Grades School from Marghita and "Octavian Goga" School Group Marghita, the average age ranging between 25 and 57 years (average=37.1 years). In the control group, 20 teachers were included (7 men and 13 women) from Horea School Group Marghita, having the age ranging between 22 and 54 (average=33.55 years).

#### Measures

TIBS – Teacher Irrational Belief Scale, Bernard, 1988; Nowicki-Strickland (Adult Nowicki-Strickland Internal-External Control Scale); ASQ – Attributional Style Questionnaire); POMS – Profile of Mood State; Dysfunctional behaviors evaluating scale – previously mentioned.

#### **Procedure**

The participants were informed that their attendance was voluntary, the discussions were confidential and the results would be used only for scientific purpose. Further on, the initial assessment meeting for the two lots took place. A second assessment in posttest at the completion of the program was fulfilled, and for the experimental lot a follow-up assessment occurred within 4 months after the intervention completion. The program developed over 3 months (March-June 2008), a meeting of 60 minutes per each week. There were delivered 15 activities which regarded the nature of emotions, of irrational beliefs, inferences and behaviors.

#### **Results and interpretation**

#### Irrational beliefs

During the pretest moment, there were no statistically significant differences between the two groups concerning the irrationality, self-downing, low frustration tolerance or demandingness towards others, so that any probable change occurred in the posttest moment might be assigned to intervention or to its absence and not necessarily to the sampling.

The pretest-posttest comparisons for the experimental group emphasized the presence of statistically significant differences between the two moments for irrationality (t=12.875, p=.001, d=5.91, very strong effect), self-downing (t=8.850, p=.001, d=4.46, very strong

effect), low frustration tolerance (t=7.752, p=.001, d=3.55, very strong effect) and demandingness towards others (t=13.926, p=.001, d=6.36, very strong effect). In case of the control group there was no statistically significant difference between pretest and posttest.

In posttest, statistically significant differences between the two groups concerning the irrationality, self-downing, low frustration tolerance or demandingness towards others were noticed.

Corroborating the results obtained after running the t Test together with those of the effect size, we could state that it seemed that the intervention proposed had an effect upon the decreament of the irrationality level (t=-5.48, p=.001, d=2.06, very strong effect of the program), self-downing (t=-3.167, p=.004, d=1.23, very strong effect of the program), low frustration tolerance (t=-3.675, p=.001, d=1.27, very strong effect of the program) and demandingness towards others (t=-9.287, p=.001, d=3.21, very strong effect of the program). Therefore, this seemed to be useful in modifying the irrational beliefs. In case of control group, the means stayed unmodified or had a slight increasing. This increasing may be due to some unidentified external factors, such as the different school environment, the two groups belonging to different schools from the same town.

ANOVA repeated measures in case of experimental group emphasized significant differences between the three stages. There were observed differences between pretest and posttest for irrationality (F(1,19)=169.624, p<.01,  $\eta^2$ partial=.899, strong effect), self-downing (F(1,19)=68.426, p<.01,  $\eta^2$ partial=.783, average effect), low frustration tolerance (F(1,19)=46.779, p<.01,  $\eta^2$ partial=.711, average effect) and demandingness towards others (F(1,19)=107.613, p<.01,  $\eta^2$ partial=.850, strong effect). The modifications occurred during the posttest did not maintain during the follow-up phase, the scores for irrationality, self-downing, low frustration tolerance and demandingness towards others having an increase.

Table 5. ANOVA repeated measures for irrational beliefs (the experimental lot)

Variable	Moment	N	m	s.d.	F	p	Partial effect size η <sup>2</sup>
Irrationality	Pretest	20	65.25	5.75	116.320	.001	.860
	Posttest	20	45.85	6.10			
	Follow-up	20	47.35	5.40			
Self-downing	Pretest	20	23.50	3.33	49.488	.001	.723
	Posttest	20	16.85	2.91			
	Follow-up	20	18.05	2.99			
Low frustration	Pretest	20	17.90	2.42	32.623	.001	.632
tolerance	Posttest	20	12.95	2.82			
	Follow-up	20	13.60	2.76			
Demandingness	Pretest	20	23.85	2.39	98.334	.001	.838
towards others	Posttest	20	14.90	2.12			
	Follow-up	20	15.70	3.01			

#### *Inferences – locus of control*

In the pretest moment, there were no statistically significant differences regarding the locus of control between the two groups. We noticed a tendency of the two groups towards internal control.

The pretest-posttest comparisons for the two groups revealed the presence of statistically significant differences in case of experimental group regarding the locus of control (t=-5.975, p<.01, effect size d=2.72, very strong effect). In case of control group there was no statistically significant difference between the pretest and posttest. In the posttest moment, significant differences between the two groups were observed (t=6.610, p<.01, d=2.14, very strong effect of the program). The rational emotive education program led to the changing of the locus of control for the experimental group. A change in the sense of balancing the control was noticed. In the pretest moment, the tendency was towards the internal control, and in posttest an increasing of the means occurred, which led to a balance between internal and external. In case of the control lot, the average registered a slight decrease, that is, a more powerful tendency towards the internal control.

Table 6. ANOVA repeated measures for inferences (locus of control) (the experimental lot)

Variable	Stage	N	m	a.s.	F	p	Partial effect size $\eta^2$
Irrationality	Pretest	20	11.50	4.03	19.675	.001	.509
	Posttest	20	16.30	2.81			
	Follow-up	20	15.35	4.25			

The ANOVA repeated measures, in case of the experimental group, emphasized significant differences between the three stages. There were noticed differences between the pretest and posttest (F(1,50)=16.068, p<.01,  $\eta^2$ partial=.458, low effect), but the changes did not maintain in time, a decrease of scores having been noticed.

#### *Inferences – attributional style*

During the pretest moment between the two lots there were not observed any statistically significant differences regarding the scores for the global attributional style, attributional style for positive events, internal negative, global negative, internal positive or global positive, so that any possible change occurred in the posttest moment might be assigned to intervention or its absence and not necessarily to sampling. But there were a significant differences regarding the attributional style for negative events, stable negative and stable positive, the teachers from the experimental group having a high predisposition towards interpreting the negative events in internal, stable and global terms, and the teachers from the control lot towards interpreting the positive events as being unstable.

The pretest-posttest comparisons for the experimental group emphasized certain statistically significant differences for the total score of the attributional style (t=-2.153, p<.05, d=0.98, strong effect), the attributional style for positive events (t=3.165, p<.01, d=1.45, very strong effect), stable negative (t=2.130, p<.05, d=0.97, very strong effect) and stable positive (t=4.708, p<.01, d=2.15, very strong effect). In case of the control group there were recorded significant differences between the two moments for the total score of the attributional style (t=-2.971, p<.01, d=1.36, very strong effect), attributional style for positive events (t=2.914, p<.01, d=1.33, a very strong effect), internal negative (t=2.295, p<.05, d=1.05, a very strong effect), internal positive (t=2.544, p<.05, d=1.16, a very strong effect), stable positive (t=2.295, p<.05, effect size d=1.05, very strong effect) and global positive (t=2.888, p<.01, d=1.32, very strong effect). In the posttest moment we noticed significant differences between the two groups regarding only the attributional style for negative events (t=2.383, p<.05, d=0.77, average effect of the program) and global negative (t=2.137, p<.05, d=0.69, average effect of the program). The differences noticed in the posttest between the two groups occured only in case of the dimensions global negative and the attributional style for the negative events, the experimental group having a much more dysfunctional attributional style for negative events in comparison with the control one.

In case of the experimental lot there was noticed an increase of the score for the attributional style, which signified a more functional attributional style, nevertheless, the scores regarding the attributing for negative events and its dimensions did not record statistically significant changes. However, as regarding the scores related to attribution for positive events, they decreased, so there was observed a more functional attributional style for positive events, thus the functionalizing global attributional style being explained. In case of the control group, the attributional style became more functional, too. As concerning the attributing for negative events and its dimensions, the scores did not considerably decrease statistically, and in case of attributing for the positive events and its dimensions we noticed a statistically significant change in the way of decreasing scores, that is, a more dysfunctional attributional style. These results do not allow us to to assign changes regarding this dimension to the accomplished intervention.

ANOVA repeated measures, in case of the experimental group, emphasized significant differences between the three stages (for the dimensions which recorded changes in posttest). There were observed differences between the pretest and posttest in case of the global attributional style (F(1,19)=26.122, p<.01,  $\eta^2$ partial=.579, average effect), attributional style for positive events (F(2,38)=16.085, p<.01,  $\eta^2$ partial=.458, low effect), stable negative

dimension (F(1,19)=9.029, p<.01,  $\eta^2$  partial=.322, low effect) and stable positive (F(1,19)=46.034, p<.01,  $\eta^2$  partial=.708, average effect). The results indicated the maintaining in time of the changes obtained from the pretest to posttest: global attributional style (F(1,19)=.193, p>.05,  $\eta^2$  partial=.010, very low effect), attributional style for positive events (F(1,19)=.313, p>.05,  $\eta^2$  partial=.016, very low effect), the stable negative dimension (F(1,19)=.918, p>.05,  $\eta^2$  partial=.046, low effect) and stable positive (F(1,19)=3.664, p>.05,  $\eta^2$  partial=.162, low effect), but the low effect sizes did not allow us to assign these results to the training factor.

Table 7. ANOVA repeated measures for inferences (attributional style) (the experimental lot)

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Variable	Stage	N	m	a.s.	F	p	Partial effect size $\eta^2$
Total ASQ	Pretest	20	-1.197	.687	5.913	.013	.237
	Posttest	20	886	.921			
	Follow-up	20	711	.629			
Positive composite	Pretest	20	4.905	.421	16.085	.001	.458
	Posttest	20	4.486	.658			
	Follow-up	20	4.200	.582			
Stable negative	Pretest	20	3.766	.649	3.917	.028	.171
	Posttest	20	3.458	.715			
	Follow-up	20	3.408	.667			
Stable positive	Pretest	20	5.150	.521	20.681	.001	.521
	Posttest	20	4.391	.684			
	Follow-up	20	4.200	.656			

#### **Emotions**

During the pretest moment between the two groups there were not observed any statistically significant differences regarding the distress (t(38)=1.849, p>.05), functional emotions (t(38)=1.854, p>.05), dysfunctional emotions (t(38)=1.659, p>.05), sadness (t(35,531)=1.536, p>.05), depression (t(38)=-.426, p>.05) or worry (t(38)=1.798, p>.05), so that any possible change occurring in the posttest moment might be assigned to intervention or to its absence and not necessarily to the sampling. A significant difference regarding anxiety occurred (t(34,184)=2.779, p<.01), the larger mean belonging to the experimental lot.

The pretest-posttest comparisons outlined statistically significant differences in case of the experimental group for distress (t=7.067, p<.01, d=3.28, very strong effect), functional emotions (t=6.682, p<.01, d=3.06, very strong effect), dysfunctional emotions (t=6.039, p<.01, d=2.77, very strong effect), sadness (t=6.409, p<.01, d=2.93, very strong effect), depression (z=-2.5-653, p<.01, d=0.20, low effect), worry (t=5.638, p<.01, d=2.58, very strong effect) and anxiety (t=6.614, p<.01, the effect size d=3.03, very strong effect). In case

of the control group, no statistically significant difference between pretest and posttest was observed.

During the posttest moment between the experimental group and the control one there were observed statistically significant differences regarding the distress (t=-5.638, p<.01, d=1.59, very strong effect), functional emotions (t=-3.485, p<.01, d=1.49, very strong effect), dysfunctional emotions (t=-3.365, p<.01, d=1.45, very strong effect) and specific emotions: sadness (t=-3.478, p<.01, d=1.45, very strong effect), depression (|z|=-2.650, p<.01, d=1.01, strong effect), worry (t=-3.061, p<.01, d=1.28, very strong effect) and anxiety (t=-3.130, p<.01, d=1.33, very strong effect).

Corroborating the results obtained with those of the effect size, we could state that it seemed that the intervention proposed had an effect upon the reducing the level of distress and of specific emotions. In case of the control lot, the averages stayed unchanged or had a slight increase. This increase may have occurred due to some unidentified external factors.

Table 8. ANOVA repeated measures for emotions (experimental group)

Variable	Stage	N	m	a.s.	F	p	Partial effect size
							$\eta^2$
Distress	Pretest	20	16.55	7.11	23.409	.001	.552
	Posttest	20	5.15	2.30			
	Follow-up	20	8.55	8.70			
Functional emotions	Pretest	20	10.60	3.91	22.767	.001	.545
	Posttest	20	4.40	1.79			
	Follow-up	20	5.45	4.75			
Dysfunctional emotions	Pretest	20	6.25	3.81	15.600	.001	.451
	Posttest	20	1.25	1.29			
	Follow-up	20	3.50	4.52			
Sadness	Pretest	20	3.90	1.94	13.408	.001	.838
	Posttest	20	1.00	1.02			
	Follow-up	20	2.30	2.88			
Worry	Pretest	20	6.70	2.34	26.257	.001	.580
	Posttest	20	6.20	3.90			
	Follow-up	20	3.15	2.21			
Anxiety	Pretest	20	5.30	2.95	28.256	.001	.598
	Posttest	20	0.90	0.85			
	Follow-up	20	1.65	1.92			

The ANOVA repeated measures, in case of the experimental group, emphasized significant differences between the three stages. There were observed differences between the pretest and posttest in case of distress (F(1,19)=19.072, p<.01,  $\eta^2$ partial=.501, average effect), functional emotions (F(1,19)=21.884, p<.01,  $\eta^2$ partial=.535, average effect), dysfunctional emotions (F(1,19)=9.531, p<.01,  $\eta^2$ partial=.334, low effect), sadness (F(1,19)=107.613, p<.01,  $\eta^2$ partial=.850, strong effect), worry (F(1,19)=32.151, p<.01,  $\eta^2$ partial=.629, average effect) and of anxiety (F(1,19)=26.850, p<.01,  $\eta^2$ partial=.586, average effect). The results

indicated the fact that the changes did not maintain in time, the scores increasing from posttest to follow-up for distress, functional emotions, dysfunctional emotions, sadness and anxiety. Only in case of worry (F(1,19)=15.046, p<.01,  $\eta^2$ partial=.629, average effect) we may speak about a maintaining of the changes, the scores in follow-up decreasing from the posttest. The Friedman test showed significant differences regarding depression ( $\chi^2$ =9.241, p=.01) in all the three moments. The post-hoc comparisons revealed major differences between the pretest and posttest (z=-2.653, p<.01, d=0.20, low effect), but there were not observed major differences between posttest and follow-up (z=-1.832, p<.05), the changes maintaining in the follow-up stage, too. However, there was noticed an increase, even though statistically insignificant, of the scores from the posttest to follow-up.

#### **Behaviors**

In the pretest moment there were statistically significant differences between the two groups regarding the behaviors: I ironize my pupils (|z|=-2.772, p<.01); I criticize the others (|z|=-2.083, p<.04); I do not hold my classes (|z|=-2.408, p<.02); I let my pupils do what they want during the classes (|z|=-2.271, p<.03); I avoid expressing my ideas even if I consider them good (|z|=-2.211, p<.03); I treat with superficiallity curricular tasks (|z|=-2.417, p<.02), the teachers from the experimental group showing these behaviors in a higher degree. Due to the fact that the experimental group had a higher rate of manifesting these behaviors, the change in the sense of decreasing the frequency of behaviors in the posttest might be considered as resulting from the attendance at the rational emotive and behavior education program.

The pretest-posttest comparisons for the experimental group revealed the presence of some significant differences for the behaviors: *I ironize my pupils* (t=5.688, p<.01, d=2.60, very strong effect), *I do not involve in extracurricular tasks* (t=3.707, p<.01, d=1.70, very strong effect), *I call them to the blackboard* (t=4.414, p<.01, d=2.01, very strong effect), *I yell at the pupils* (z=-2.675, p<.01, d=0.77, average effect), *I ask my pupils to stand up* (z=-2.835, p<.01, d=0.80, very strong effect), *I lower their mark because of disobedience* (z=-2.460, p<.05, d=0.65, very strong effect), *I label the pupils* (z=-3.372, , p<.01, d=1.23), *I postpone work tasks* (z=-3.035, p<.01, d=0.95 strong effect), *I criticize the others* (t=-2.496, , p<.05, d=0.65), *I do not hold my classes* (z=-2.653, p<.01, d=0.72), *I let my pupils do what they want during the classes* (z=-2.311, p<.05, d=0.57), *I avoid expressing my ideas even if I consider them good* (z=-3.358, p<.01, d=1.15, strong effect), *I treat with superficiallity curricular tasks* (z=-2.294, p<.01, d=0.93), in posttest the rate of manifesting these behaviors having a decrease. Also, for the control group there were observed statistically significant differences

between pretest and posttest for the behaviors I ironize my pupils (z=-2.653, , p<.01, d=0.72), I postpone work tasks (z=-2.913, p<.01, d=0.81), I avoid contact with colleagues or superiors (z=-2.263, p<.05, d=0.56), I let my pupils do what they want during the classes, (z=-2.887, p<.01, d=0.82) and I superficially treat curricular tasks (z=-2.360, p<.05, d=0.60), the teachers expressing these behaviors in a higher degree in posttest.

The statistically significant differences between the two groups in the posttest moment regarded the behaviors *I ironize my pupils* (t=-3.101, p<.01, d=1.00, very strong effect), *I do not involve in extra curricular tasks* (t=-3,437, p<.01, d=1.34, very strong effect) and *I call them to the blackboard* (t=-4.032, p<.01, d=1.42, very strong effect), *I yell at the pupils* (|z|=-2.544, p<.05, d=0.52, average effect), *I put the disobedient pupils absent* (|z|=-2.386, p<.05, d=0.80, strong effect), *I ask my pupils to stand up* (|z|=-4.195, p<.01, d=2.02, strong effect), *I lower their mark because of disobedience* (|z|=-3.946, p<.01, d=1.64, strong effect), *I dismiss pupils from classes* (|z|=-2.143, p<.05, d=0.72, average effect), *I label the pupils* (|z|=-2.537, p<.05, d=1.00, strong effect), *I postpone work tasks* (|z|=-3.263, p<.01, d=1.23, strong effect), *I gossip the colleagues or superiors* (|z|=-2.639, p<.01, d=0.92, strong effect), *I let my pupils do what they want during the classes* (|z|=-2.247, p<.05, d=0.82, strong effect) and *I treat with superficiallity curricular tasks* (|z|=-2.976, p<.01, d=1.06, strong effect), the teachers from the experimental group showing these behaviors to a lower degree in comparison with those from the control group. Therefore, the intervention seemed to help modifying the degree of manifestation of the aforementioned dysfunctional behaviors.

The Friedman test emphasized that there were statistically significant differences between the three moments for the experimental group in what concerns the behaviors (which have shown changes in posttest): *I yell at the pupils* ( $\chi^2$ =17.393, p<.01), *I ironize my pupils* ( $\chi^2$ =14.351, p<.01), *I do not involve in extracurricular tasks* ( $\chi^2$ =17.227, p<.01), *I call them to the blackboard* ( $\chi^2$ =12.040, p<.01), *I ask my pupils to stand up* ( $\chi^2$ =9.241, p=.01), *I lower their mark because of disobedience* ( $\chi^2$ =8.857, p<.05), *I label the pupils* ( $\chi^2$ =21.957, p<.01), *I postpone work tasks* ( $\chi^2$ =14.486, p<.01), *I criticize the others* ( $\chi^2$ =6.533, p<.05), *I do not hold my classes* ( $\chi^2$ =12.182, p<.01), *I let pupils do what they want during the classes* ( $\chi^2$ =9.347, p<.01), *I avoid expressing my ideas even if I consider them good* ( $\chi^2$ =16.745, p<.01), *I treat with superficiallity curricular tasks* ( $\chi^2$ =14.976, p<.01). The behaviors *I yell at the pupils* (z=-2.765, p<.01, d=0.77, average effect of the training), *I ironize my pupils* (z=-3.391, p<.01, d=1.27, strong effect of training), *I do not involve in extracurricular tasks, I call them to the blackboard* (z=-3.106, p<.01, d=0.99, strong effect of training), *I lower their mark because of disobedience* (z=-2.460, p<.05, d=0.65, average effect of the training), *I label the pupils* (z=-

3.372, p<.01, d=1.23, strong effect of training), *I postpone work tasks* (z=-3.035, p<.01, d=0.95, strong effect of training), *I criticize the others* (z=-2.496, p<.05, d=0.65, average effect of the training), *I do not hold my classes* (z=-2.653, p<.01, d=0.72, average effect of the training), *I let pupils do what they want during the classes* (z=-2.311, p<.05, d=0.57, average effect of the training), changed in posttest in the sense of decreasing the manifestation degree, the modifications maintaining in follow-up as well. In case of the behaviors which registered a decrease of the manifestation degree in posttest, *I ask my pupils to stand up* (z=-2.835, p<.01, d=0.80, strong effect of training), *I avoid expressing my ideas even if I consider them good* (z=-3.358, p<.01, d=1.15, strong effect of training) and *I treat with superficiallity curricular tasks* (z=-2.994, p<.01, d=0.93, strong effect of training), the modifications did not maintain in the follow-up stage, the manifestation rate increasing.

#### **Discussions**

The rational emotive and behavioral program led, in posttest, to statistically significant differences between the three groups as regarding the irrational beliefs, the inferences, emotions and behaviors. The effect sizes are average or strong.

The level of irrationality and of specific irrational beliefs (self-downing demandingness towards others and low frustration tolerance) of the teachers included in this study was not very high in pretest, but even in this case the obtained results showed a significant decrease of their level as a result of participating in the program, the effect of the intervention being a strong one (d=5.91 for irrationality, d=4.46 for self-downing, d=3.55 for low frustration tolerance and d=6.36 for demandingness towards others). During the intervention the teachers were aware of the connection between the way in which they assessed the situations they confronted with and the emotional and behavioral consequences, noticing the dysfunctional character of the latter for their well-being and and professional activity. The participants learnt how to identify the thinking errors and how to verify their validity. A very important aspect observed by the leader within the activities was the intervention of the other members of the group when one of the participants has displayed a dysfunctional thinking, which led us to the supposition that they understood the presented concept and could apply it in everyday life. The changes occurred as a result of participation in the training did not maintain in the follow-up stage, the teachers showing statistically significant increase of the irrationality and of specific beliefs level. However, this increase maintained them at a very low level of these variables, as in posttest. The increase of the teachers' irrationality in posttest may be explained by what is called mental contamination. This is a phenomenon by which an individual shows unwanted reasonings, emotions or

behaviors because of the unconscious and uncontrollable information processing (David, Macavei, Szentagotai, 2005). The modification of irrationality is a difficult process due to the fact that these beliefs have accompanied teachers' reasoning over a long period of time. The endorsement process of the irrational beliefs may be detected, in many cases, even in the childhood.

In case of the teachers from the control group, there was observed an increase of the level of irrationality and irrational beliefs from pretest to posttest. This fact can be also explained by the fact that the presence of irrational beliefs is identified only in the circumstances in which an individual is exposed to a stressing or unpleasant situation. Without exposing to an activating event, the probability of irrational beliefs manifestation is not a very high one.

The **control** factor significantly modified in case of the experimental group from pretest to posttest as a result of attendance at the irrational emotive and behavioral education program. In the pretest, the scores indicated an internal control and in the posttest stage the scores increased significantly, the participants displaying an ambivalent control. It seemed that the intervention had an important effect, the effect size being a strong one (d= 2.72). the effects did not maintain in the follow-up, the scores decreasing significantly from posttest, but the orientation still remained ambivalent. The rational emotive and behavioral intervention regarding the source of control has as purpose responsibilization of individuals concerning their own emotions and behaviors. By the activities devoted to unconditional self-acceptance within the program, a rational responsibilization towards their personal actions was aimed. A mere internal control, under the presence of global negative assessments regarding the own self, may lead to emotional distress.

As regarding the control group, the tendency was that of internalizing the control, the scores decreasing from pretest to posttest, in the second stage the participants having strong internal control. The persons that displayed a strong internal control had the tendency of not taking into account all the aspects of the situation they confronted with, excessively blaming themselves in case of negative events.

The internal, stable and global **attributional style** in interpreting the negative events may lead to dysfunctional emotions such as depression (Ambramson et all, 1989, apud Cole, Warren, Dallaire, Lagrange, Travis and Ciesla, 2007) and reveals the presence of self-downing. The pretest-posttest comparisons indicated the presence of a more functional attributional style for both lots (t<sub>experimental group</sub>=-2.153, p<.05; t<sub>control group</sub>=-2.971, p<.01), however the averages indicated higher functionality in case of the experimental lot

(m<sub>.experimental group</sub>=-.886, m<sub>.control group</sub>=-1.077). Also, there were observed statistically significant changes for the two groups between pretest and posttest as regards the attributions for the positive events, the two groups manifesting more dysfunctional attributional style in posttest. The teachers considered that the positive events from their life were due to some external factors and that such factors would not often occur in their life. In the posttest moment there were recorded significant differences between the two groups as regarding the attributions for negative events and global negative dimensions, which signifieed the fact that the teachers from the experimental group displayed a more dysfunctional attributional style than those from the control group, thus maintaining the difference existent in the posttest between the groups. It seemed that, in case the teachers from the experimental group confronted with negative situations they had the tendency to consider that those events were caused by them and that things would always happen in that way. The changes observed in case of the experimental group maintained in the follow-up stage, but the effect sizes for each dimension were very low. Taking these results into consideration, even under the circumstances of a strong effect size for the experimental group (d= .98) we cannot state that the attendance at the rational emotive and behavioral education program has brought changes as far as the attributional style is concerned.

Once the irrational beliefs were modified, in the sense of their rationalizing, changes regarding the dysfunctional emotional consequences and distress occured. The initial assessment of the teachers showed average levels of distress and of functional and dysfunctional emotions for the two groups. There were observed statistically significant differences between the teachers from the experimental group and those from the control group as regarding anxiety, the former having higher scores on this emotional dimension. The posttest moment showed changes in the sense of decreasing the level of distress and of its emotional components for experimental group, the effect size indicating strong effect of the program in this respect (d=3.28 for distress, d=3.06 for functional emotions, d=2.77 dysfunctional emotions, d=2.93 for sadness, d=2.58 for worry, d=3.03 for anxiety). The effect size for the depression component showed low effect of the program (d= 0.20). The modification did not maintain in the follow-up stage the experimental group recording a significant increase of the scores for the emotional distress and its components, but the increase maintained the values at low level as in posttest. The only change maintained in follow-up was that connected to worry and depression. A possible explanation might be given by the increase of the irrationality level in follow-up. Also, the follow-up assessment was made at the beginning of the school year (2009-2010), that constituted an assessment moment for teachers. As regarding the control group, in the posttest moment it recorded increases of the distress level, even though insignificant, these being explained by the increase of the irrationality level from pretest moment to posttest. The differences observed in pretest between those two lots regarding anxiety were maintained in posttest, in the sense of anxiety level increase in case of the control lroupot and of its decrease in case of the experimental group, as a result of attendance at the program.

According to ABC model, the evaluation of situations in irrational terms, has as consequences the dysfunctional emotions and behaviors. The dysfunctional behaviors of the teachers lead to dysfunctional reactions on the part of the pupils (Petegem, Creemers, Aelterman, 2005). As regarding the two groups, the dysfunctional manifested in the higher degree in the pretest moment are: I yell at the pupils (12.5%), I ironize the pupils (15%), I do not involve in extracurricular tasks (30%), I call them to the blackboard (47.5%), I ask the pupils to stand up (32.5%), I label the pupils (12.5%). In the pretest moment, too, there were emphasized differences in manifesting the dysfunctional behaviors (I ironize the pupils, I criticize the others, I do not hold my classes, I let pupils do what they want during the classes, I avoid expressing my ideas even though I consider them good and I superficially treat the school tasks), between the teachers from the experimental group and those from the control group, in the sense of a higher rate of manifesting of these behaviors by the teachers from the experimental group. The changes in posttest regarded the behaviors I ironize the pupils (d=2.60), I do not involve in extracurricular tasks (d=1.70), I call them to the blackboard (d=2.01), I yell at the pupils (d=0.77), I ask my pupils to stand up (d=0.80), I lower their mark because of disobedience (d=0.65), I label the pupils (d=1.23), I postpone work tasks (d=0.95), I criticize the others (d=0.65), I do not hold my classes (d=0.72), I let pupils do what they want during the classes (d=0.57), I avoid expressing my ideas even though I consider them good (d=1.15) and I treat with superficiallity the school tasks (d=0.93) for the experimental group. A decrease of the manifestation rate of these dysfunctional behaviors was observed. Strong and average effect sizes allow us to state that the attendance at the intervention program led to the modifications of the dysfunctional behaviors in case of teachers. Within the program activities, which regarded the behaviors, aspects concerning the efficient ways to react to the pupils' behaviors (reinforcements, punishment) were discussed. There were pointed out the behaviors which could constitute a negative reinforcement for the pupils (I let pupils do what they want during the classes, I ask my pupils to stand up, I dismiss pupils from classes) and also the role of positive reinforcements in case of some desirable behaviors on the part of problematic pupils. Also, there were analyzed the behaviors shown by teachers as a

result of self-downing and of demandingness towards others, especially the teachers' noninvolvement in the curricular tasks due to their dissatisfaction towards the system or towards the way in which the didactic activity is managed. The posttest changes maintained in the follow-up stage, too, for the behaviors I yell at the pupils, I ironize the pupils, I do not involve in extracurricular tasks, I call them to the blackboard, I lower their mark because of disobedience, I label the pupils, I postpone work tasks, I criticize the others, I do not hold my classes, I let pupils do what they want during the classes. However, the rate of manifesting the behaviors I ask my pupils to stand up, I avoid expressing my ideas even though I consider them good, and I superficially treat the school tasks increased in follow-up. The explanation for the latter ones also lies itself in the fact that an increase of the irrationality level in followup was observed. It is very important to mention that the changes observed in the posttest are maintained in the follow-up stage, only if the teachers decide to apply in the teaching practice what they learnt during the 15 hours of rational emotive education. The research studies in the field of programs for teachers in pupils' disruptive behavior management (Giallo and Hayes, 2007) showed that teachers considered themselves satisfied and confident regarding the abilities acquired within the program. But, this fact will not always lead to improvements of teachers or pupils behavior if these abilities are not applied within the classroom activities.

The teachers from the control group manifested to a larger extent the dysfunctional behaviors *I ironize the pupils*, *I postpone work tasks*, *I avoid contact with colleagues and superiors*, *I let pupils do what they want to during the classes* and *I superficially treat the school tasks*, in the pretest moment in comparison with the posttest moment. In case of the other behaviors, no changes were observed.

The rational emotive and behavior education proved its effectiveness in reducing irrationality and emotional distress in case of children (Cardenal Hernaez and Diaz Morales, 2000; Popa, 2004; Trip, 2007; Bernard, 2008). The studies indicated the necessity and effectiveness of applying the cognitive-behavioral or rational emotive and behavioral concepts in working with teachers, in reducing irrationality and ameliorating their emotional distress (Sharp and Forman, 1986, Jesus and Conboy, 2001; Nucci, 2002).

The program we have initiated represents a first step in proving the effectiveness and necessity of implementing such programs in future, and the obtained results encourage us to assert that these types of interventions can be successfully accomplished in schools.

#### **Conclusions and Final Discussions**

Teachers' emotional distress is a reality, especially on the "drifting" Romanian society. The teachers' status does not have the same value in society as it used to, sometimes this professional category being accused or disregarded. The professional training of teachers generally (unfortunately!) implies their informing about the theoretical aspects in the field, knowledge regarding the pupils' development characteristics, the didactic methods specific to the field etc, but no emphasis is laid on the developing of the future teachers. Once they start their work in schools, they have to confront with problems related to the pupils' disruptive behaviors, the latter's lack of motivation, their relation with the parents and colleagues, the system functioning etc. Under the circumstances of an erroneous assessment of these situations, the teacher's reaction might be a dysfunctional one (emotional distress or inadequate behaviors).

Approaching a phenomenon is not possible without examining the aspects related to it. In this respect, we have tried a reviewing of the research works on this topic by accessing some online libraries (springerlink, ebsco, sagepub, elsevier), as well as by consulting some volumes found in different libraries of renowned universities from our country. There have been clarified the theoretical aspects related to the rational emotive and behavioral therapy and its application (the rational emotive and behaviors education) and the teachers' emotional distress.

Methodologically, the current paper has accomplished the adapting on the Romanian population of an instrument for assessing the irrational beliefs specific to teachers (Teachers' Irrational Beliefs Scale), an instrument devised by Michael Bernard (1988). This can constitute an important tool for the periodical assessment of teachers or in the assessment completed within the intervention programs established by the school psychologists.

We consider that the most important contribution of our research paper is that on the practical level: the identification of the cognitive factors involved in teachers' emotional distress, as well as the devising and implementing of an intervention program for teachers based on the principles of the rational emotive and behavioral therapy. Our findings have proved, once again, the impact of the irrational beliefs in producing the emotional distress and their mediator role in relation to inferences.

The author's personal contribution is represented by the devising and implementing of the rational emotive and behavioral education program. In devising the program we took into consideration the intervention programs of cognitive-behavior type for teachers, implemented at international level, the structure of the program following the structure of the rational emotive and behavior education programs (mainly the programs developed by Ann Vernon). The implementation of an intervention program for teachers has constituted the first experience of this level for the author of this research study. There were a series of barriers in developing the therapeutical relation with the participants, the most important one being the age. The first activities have been influenced by teachers' reticence on the counselor's "expertise", but their reticence has vanished during the experiment and the teachers actively involved in the required tasks, the results confirming this fact. Professionally, this experience has made us aware of our limits, vulnerabilities, but also of our abilities. The cognitive restructuring of the irrational beliefs: "Pupils have always to be obedient", "If I do not manage to maintain obedience during the class I am a bad teacher", "I should be asked to give my opinion regarding the decisions related to school" or "I should not work so much" have led to changes in the level of teachers' emotional distress and in the degree of manifesting the dysfunctional behaviors (I yell at pupils, I postpone the work tasks etc). These results offer a new perspective on the field of teachers' counseling and, as well, an extremely optimistic perspective regarding the support that can be given to this professional category.

However, we admit the fact that, as each scientific research has its limits, our study is not faultless, too. One of the identified limits is represented by the absence of the placebo group, an important element in assessing the effectiveness of intervention programs. During our program implementation period, there were not identified training programs for teachers, or they were identified with delay, the pretest and posttest assessment having not been possible. The presence of the placebo group could have contributed to a more accurate evaluation of the effectiveness of the rational emotive and behavior education program.

Another limit of our research was related to the participants' assessment. The instruments used are scales or questionnaires of "self-report" type these being subject to the social desirability effect (we did not use a scale of social desirability). As regarding the group of the teachers included in the rational emotive and behavior education program, the scores from the pretesting stage pointed out average levels of irrationality and of emotional distress. Nevertheless, within the activities strong occurrences of the irrationality were detected, mainly within the tasks which evoked particular situations form teachers professional life. Also, as far as the levels emotional consequences are concerned, there were noticed discrepancies between the occurrence within the program and the assessment during the pretest. The emotional and behavior reactions expressed within the activities revealed a higher level of the functional or dysfunctional emotions than the average one. Developing a therapeutical relation with the participants contributed to the visible display of these

dimensions. The size of the sampling lot (20 teachers in the experimental lot) is another limit of the present research study and, at the same time, a difficulty in implementing the programs for teachers. The initial sample was made up of 30 teachers, but there were several cases of droping out. Motivating teachers was rather difficult, taking into account the fact that the attendance at the program was based on volunteering. Non-involvement in extracurricular tasks is a frequently met behavior at teachers included in the current research study. They do not want to do more than is compulsory, motivating it by the fact that "We have too many tasks to do and the rewards are missing". Moreover, they have responsibilities towards their families, and the activities took place out of the regular schedule.

Teachers' well-being contributes to creating a climate favourable to the educational act. Taking this fact into consideration, as well as our findings, we sustain the importance of investigating teachers' emotional distress on a national level, this area of research being a deficient one in our country. In this respect, one of the research directions may be represented by taking into account the personality traits, the analysis of the relation between these and the different types of irrational beliefs specific to teachers, as well as the relation to the emotional distress. Also, we plead for the importance and necessity of implementing such programs focused on managing the teachers' emotional distress. An important aspect that can be analyzed after the implementation of these programs is represented by the investigation of the mediator role of the irrational beliefs in producing changes on emotional and behavioral level. Implementing such programs will constitute a challenge for school psychologists, the support of County School Inspectorate or of the County Centers of Psychopedagogical Assistance. The participation of teachers in such programs is conditioned by a series of factors: responsibilities within family, the absence of free time, the absence of motivation. Taking all these aspects into account, we consider that the implementation of such programs in schools or even the inclusion of some optional courses in the universities' curricula for training the future teachers should be compulsory.

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