



COGNITIVE FACTORS RELATED TO TEACHERS EMOTIONAL DISTRESS

Carmen Hortensia Bora •
University of Oradea, Romania

Abstract

This study aims to examine the role of cognitive factors in emotional distress of teachers. According to cognitive-behavioral theories, irrational beliefs, locus of control and attributional style are the cognitive factors investigated. A number of 149 teachers participated and completed the measures for irrational beliefs (Teachers's Irrational Belief Scale), locus of control (Adult Nowicki-Strickland Internal-External Control Scale), attributional style (Attributional Style Questionnaire) and emotions (Emotion Scale). Results showed that irrational beliefs are important predictors in the evolution of emotional distress, by mediating the effect of control on emotional distress.

Keywords: teacher; emotional distress; cognitive factors

Introduction

Emotional distress is a widespread in professions which involve human intrecations. Research in this field targeted different aspects of this phenomenon: sources, causes, effects and coping strategies.

Rational emotive and behavioral theory (REBT, Ellis, 1962) states hat irational beliefs directly influence the emotional distress. Kyriacou (1978, 2001) defined teachers' stress as a negative emotional experience produced by teachers' perception on working situations.

Correspondence concerning this paper should be addressed to:

• Ph.D., The Faculty of Social and Humanistic Sciences of University of Oradea, Psychology Department. Address: Universitatii st., no. 5, Corp X, Oradea, Romania, 410087 E-mail: carmen_bora@yahoo.com

Sources of distress were grouped into four categories: students misbehaviors, inadequate working conditions, time pressure and tense relationship with administration. From a REBT perspective, these sources represent the activating event (A) in the ABC model. Some of the research in this field investigated the relationship between sources of stress (activating event - A) and emotional distress (emotional consequences - C), but REBT states that this relationship is mediated by the appraisals individuals make regarding the events. In the absence of these appraisals, emotional distress is not present.

A series of studies investigated the cognitive factors involved in the emotional distress of teachers. Harris, Haplin and Haplin (1985) investigated teachers' attitudes toward students, showing that authoritarian attitudes lead to increased levels of emotional distress. These attitudes were also investigated by Bernard (1988), who emphasized the role of irrational beliefs (low frustration tolerance, global rating of human worth, demands toward students and demands for justice) in the genesis of emotional distress. Zingler and Anderson (1990) sustain the direct relationship between irrational beliefs and teachers stress. According to the ABC model of emotional distress from the rational emotive and behavioral theory, these cognitive factors, even though they haven't been named directly as irrational beliefs, they are part of the evaluations (B) individuals make in specific situations.

Objective

The aim of the study is to investigate the cognitive factors involved in the emotional distress of teachers. The theoretical framework of the research is rational emotive and behavioral theory (Ellis, 1962).

Method

Participants

The present study compressed 149 (38 male, 111 female) teachers in Bihor county, from primary school (18 participants, 12,1%), secondary school (32 participants, 21,5%) and high school (99 participants, 66,4%). Participants were aged between 22 and 60, mean age being 35,42 ani.

Measures

Teacher Irrational Belief Scale (Bernard, 1988) measures irrational beliefs of teachers. The scale contained 20 items and teachers are asked to indicate on a 5 point Lickert scale the extent to which they agree or disagree with an irrational belief. Factor analysis on Romanian population (Bora, Bernard, Trip, Decsei-Radu, & Chereji, 2009) revealed three factors: demandingness toward others (13.32%), self-downing (12.57%), low frustration tolerance (11.19%). Cronbach's alpha for the subscales and the global score ranged between .54 and .73 .

Adult Nowicki-Strickland Internal-External Control Scale - is a measure of locus of control as a generalized expectancy of control. The scale consists in 40 items. A .74 Cronbach's alpha was obtained.

Emotions scale - 28 items were extracted from *POMS - Profile of Mood State* (McNair, Lorr and Droppleman, 1981, *apud* Marian, 2007). The items extracted are words describing functional and dysfunctional emotions related to worry/anxiety and sadness/depression. Also a global score of distress was computed. The Cronbach's alpha for the negative functional emotions, negative dysfunctional emotions and the global distress score ranged between .66 and .92;

Attributional Style Questionnaire (ASQ, Peterson, Semmel, von Baeyer, Abramson, Metalsky și Seligman, 1982, *apud* Marian, 2010). Measures the tendency to make causal inferences/attribution, the locus (internal vs. external), globality and stability of these. Scores for negative attributional style (for the negative events), positive attributional style (for positive events), a global score and specific dimensions (internal negative, stable negative, global negative, hopelessness, internal positive, stable positive, global positive, optimism) can be computed. α Cronbach's for Romanian population (Marian, 2010) range between .61 and .83.

Procedure

All participants completed all the measures voluntarily, after being informed about the goal of the research. Teachers were involved with the help of school psychologist.

Results

We proceeded by performing a path analysis for the causal model (Figure 1). There were 4 latent variables taken into account: 3 independent variables (irrational beliefs, control and attributional style) and one dependent variable (emotional distress).

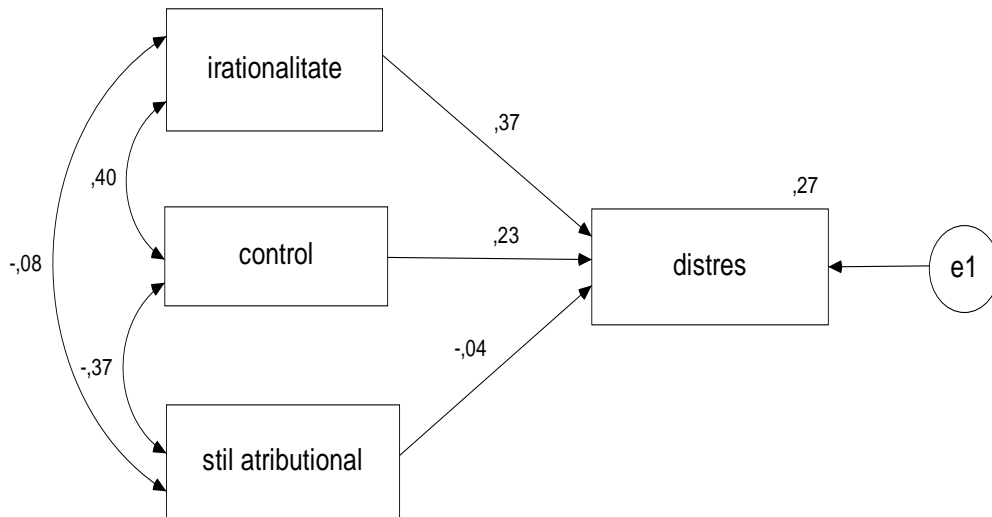


Figure 1. Path analysis for the causal model of distress (standardized coefficients are represented)

As results suggest, the path attributional style → distress is not significant ($\beta=-.04$, $p=.597$), this variable being removed from the model (attributional style is not a predictor for the emotional distress of teachers). The other two paths irrationality → distress ($\beta=.37$, $p=.000$) and control → distress ($\beta=.23$, $p=.006$) are statistically significant.

Irrationality encompass 3 dimensions: global rating of self worth, low frustration tolerance and demands to others. Control has 2 facets named control 1 (internal) and control 2 (external), which was necessary to elaborate the model. Emotional distress has 2 components: functional emotions and dysfunctional emotions.

Structural equation analysis indicates that the proposed model is fit (Tabel 1).

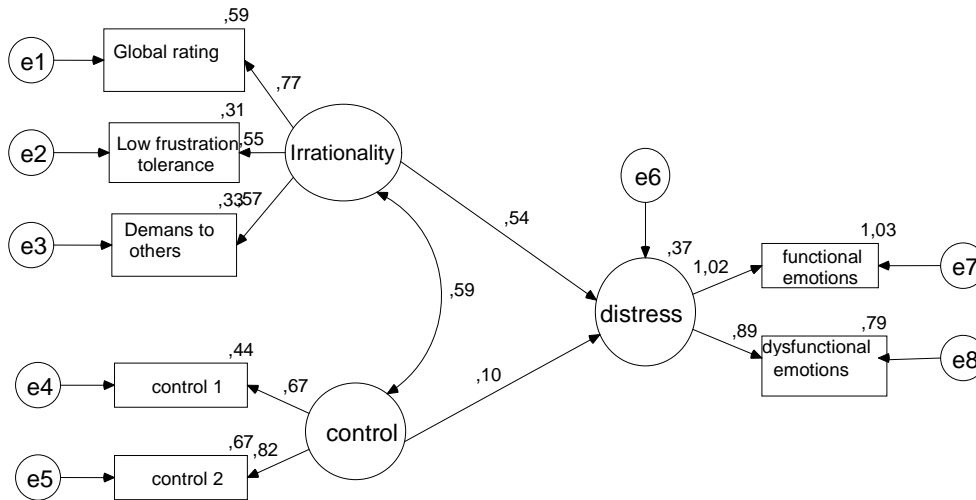


Figure 2. Path diagram for the model regarding the influence of cognitive factors (irrationality, control) on emotional distress after removing the variable measuring attributional style

As shown in Table 1, the values of the principal absolute indicators of the model sustain the fitness of our proposed model: $\chi^2(11)=10.768$, $p>.05$, SRMR=.086 (lower than .10), RMSEA (root mean squared error of approximation)=.000 (does not surpass .08), GFI (goodness of fit index)=.980 (higher than .90 and lower than 1) and CFI (comparative fit index)=1 (above .90).

Table 1 Values for the principal absolute indicators for the proposed factorial model regarding the influence of cognitive factors on emotional distress

χ^2	χ^2 normalized (CMIN/DF)	df	p	SRMR	RMSEA	GFI	CFI
10.768	.979	11	.463	.084	.000 [.000-.085]	.980	1.000

Table 2 and the coefficients ($\beta=.105$, $p>.05$) reported in the model indicates that Control does not influence directly emotional distress. The value of $r^2=.37$ (Figure 2) shows that the two independent variables explain 37% of the distress variance. The Control variable was a predictor in the

initial path analysis, and the model (which includes Control) postulated by us is fitted, which leads us to the hypothesis of mediation of irrational beliefs over the influence of control on emotional distress.

Tabel 2. Influence of irrational beliefs and control over emotional distress (initial model)

	Estimare	S.E.	C.R.	P
Distress <--- Irrationality	1,927	,502	3,842	***
Distress <--- Control	,274	,315	,871	,384

Note: *** $p < .001$

Next, mediation models of the relationship among irrational beliefs, control and emotional distress were analyzed. In our case, the independent variable is control (X), the dependent variable (Y) is emotional distress and the mediator variable (M) is irrationality, global rating of human worth, low frustration tolerance and demands to others.

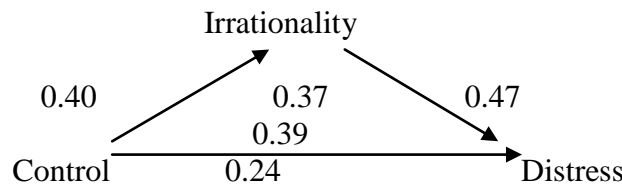


Figure 3 Mediation diagram. Values above line reflect bivariate relations (r) and those below multivariate relations (β). All relations are significant

Sobel test indicates that the relationship between the source of control and emotional distress is mediated by irrationality ($z=3,53, p < .001$).

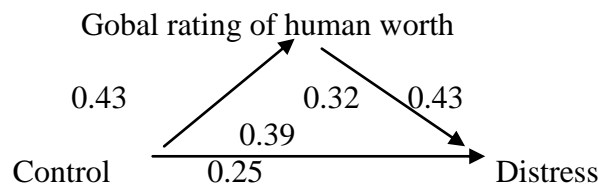


Figura 4. Mediation diagram. Values above line reflect bivariate relations (r) and those below multivariate relations (β). All relations are significant

Sobel test indicates that the relationship between the source of control al emotional distress is totally mediated by irrationality ($z=3.26$, $p<.001$).

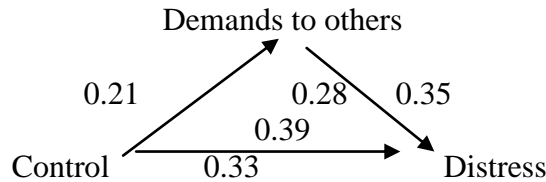


Figure 5. Mediation diagram. Values above line reflect bivariate relations (r) and those below multivariate relations (β). All relations are significant

In the case of, demands to others, Sobel test indicates that the relationship between the source of control al emotional distress is mediated by irrationality ($z=2.06$, $p<.05$).

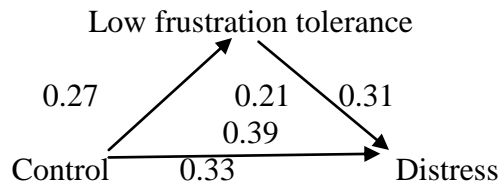


Figura 6. Mediation diagram. Values above line reflect bivariate relations (r) and those below multivariate relations (β). All relations are significant

In the case of, demands to others, Sobel test indicates that the relationship between the source of control al emotional distress is totally mediated by irrationality ($z=2.10$, $p<.04$).

Conclusions

Our results are in concordance with previous research on emotinal distress for general population or specifically for teachers. Irrationality, sepcific irrational beliefs are important predictors of emotional distress, them mediating the influence of inferences (locus of control).

The impact of information processing in teachers' emotional distress was previously investigated. Morraco and McFadden (1981) have emphasized the role of cognitive factors (teachers' attitudes towards stressors) in emotional distress. Tuettemann and Punch (1993) showed that teachers' perceptions regarding their activity can exacerbate or alleviate their emotional distress. Global rating regarding their activity produce distress (The fact that I got a bad result in my activity means that I am not a good teacher) and situational rating can ameliorate distress (One failure doesn't mean that I'm not a good teacher).

Bremejo-Toro and Preto-Ursua (2006) indicated that teachers with high levels of low frustration tolerance report high levels of burn-out and depressive affects and teachers with high levels of demands toward others report high levels of stress.

Even though there are studies showing that there is a relationship between inferences (attributions, locus of control) and the emotional state of individuals (Schachter & Singer, 1962; Harris, Haplin, & Haplin, 1985), recent research in cognitive psychology indicate that these lead to emotional distress because they activate evaluations individuals make in specific situations (David & McMahan, 2001).

Szentagotai and Freeman (2007) investigated the relationship between irrational beliefs and automatic thoughts (inferences) in emotional distress, both factors being central in the two theories of psychopathology, cognitive-behavioral theory and rational emotive and behavioral theory. Data was collected from 170 patients diagnosed with major depression. Results indicated a direct relation between irrational beliefs and distress, automatic thoughts being considered by REBT model as part of clinical symptoms. Irrational beliefs mediates the relationship between automatic thoughts and distress. If inferences are not further evaluated by individuals, they will not produce distress.

These results show that flexibility, frustration tolerance and situational rating should be targeted when intervention programs are developed for teachers. Mental health of teachers is an important dimension in the educational process and children benefit from it.

Of course, our study has its limitations, by not measuring directly the automatic thoughts and maybe targeting teachers with high levels of emotional distress.

References

- Bermejo-Toro, L., & Prieto-Ursua, M. (2006). Teachers' irrational beliefs and their relationship to distress in the profession. *Psychology in Spain, 10*(1), 88-96.
- Bernard, M. E. (1988). Teacher irrationality and teacher stress. *Paper presented at the 24th International Congress of Psychology*, Sydney, Australia.
- Bora, C., Bernard, M., Trip, S., & Decsei-Radu, A., & Chereji, S. (2009). Teacher Irrational Belief Scale - Preliminary Norms for Romanian Population. *Journal of Cognitive and Behavioral Psychotherapies, 9*(2), 211-220.
- David, D., & McMahon, J. (2001). Clinical Strategies in Cognitive Behavioral Therapy; A Case Analysis. *Romanian Journal of Cognitive and Behavioral Psychotherapies, 1*(1), 71-86.
- Ellis, A. (1962). Reason and emotion in psychotherapy. New York: Lyle Stewart.
- Harris, K., Halpin, G., Halpin, G. (1985). Teacher characteristics and stress. *Journal of Educational Research, 78*(6), 346-350.
- Kyriacou, C. (2001). Teacher Stress: directions for future research. *Educational Review, 53*(1), 27-35.
- Kyriacou, C., & Sutcliffe, J. (1978). A model of teacher stress. *Educational Studies, 4*(1), 1-6.
- Lazarus, R. S. (1966). *Psychological stress and the coping process*. New York: McGraw-Hill.
- Marian, M. (2010). The Attributional Style Questionnaire: A validation study on the romanian population. *Analele Universității din Oradea, Fascicula Psihologie, XVII*, 124-141.
- Marian, M. (2007). Short Form of the Profile of Mood States (P.O.M.S.). Psychometric information. *Analele Universității din Oradea, Fascicula Psihologie, XIV*, 101-110.
- Moracco, J. C., & McFadden, H. (1981). Principal and counsellors: Collaborative roles in reducing teacher stress. *NASP Bulletin, 65*(477), 41-46.
- Schachter, S., & Singer, J. E. (1962). Cognitive, social and psychological determinants of emotional state. *Psychological Review, 69*, 379-399

- Szentagotai, A., & Freeman, A. (2007). An analysis of the relationship between irrational beliefs and automatic thoughts in predicting distress. *Journal of Cognitive and Behavioral Psychotherapies*, 7(1), 1-9.
- Zingle, H.W., & Anderson, S. C. (1990). Irrational beliefs and teacher stress. *Canadian Journal of Education*, 15(4), 445-449.

Received April 20, 2017
Revision received May 21, 2017
Accepted June 2, 2017