Cognitive and emotional distress evaluation for undergraduate teachers

Lucica Emilia Coșa*

University „Petru Maior”, Teacher Training Department, Târgu Mureș, Nicolae Iorga Avenue, Nr. 1., Postcode 540088, Romania

Abstract

This study aims to identify the emotional distress incidence in basic educational level teachers and determine the level in which high emotional distress is associated with certain irrational cognitions and high automatic thinking. Ascertaining the comprehensive study conducted on a sample of 834 teachers, we identified strong positive correlations between the high level of distress and high irrationality and high automatic thinking. The study results could stand as foundation for the implementation of efficient distress management programs able to intervene in the cognitive evaluation processes namely the intervention through rational emotiveness and behavioral education.

Keywords: irrational thinking; automatic thinking; emotional distress; teachers; evaluation cognitive;

1. Introduction

In spite of theoretical and practical developments approaches of specialists from different fields, which time now offers perhaps more than ever, the possibility and necessity of new analytical and investigational openings which lead towards a better and more efficient stress management. Among the fields most affected by stress, studies show teaching at the top of the list. The published Lazarus’ theory („Psychological Stress and the Coping Process”, 1966), is the step which leads towards directing research from the stress field in another direction than before, thus contributing to the birth of new research paradigms, paradigms which stand to offer an elaborate and complex outlook on stress, as well as the transactional stress theory.

From this perspective, stress is defined as “a particular interaction relationship between a person and the environment in which it is important to evaluate the environment’s demands which exceed the...
personal adaptation resources and threaten the welfare of a person; this process activates coping mechanisms and feed-back type responses at an affective – physiologic, cognitive and behavioral level. (Lazarus cit. by Baban, 1998). This new outlook on stress brings forth a series of new concepts such as “threat”, “transaction”, “evaluation”, “coping”. An analysis of the expert literature enables us to recognize that a great part of the stress research from this point of view is based on evaluating and coping. In the event that the stimulant is evaluated as a threat, the processes of eliminating or reducing it are activated, known as adjustment or coping.

Understanding psychological mediators of stress is facilitated by analyzing the evaluation or transactional stress theory starting from the architecture of the human psyche as presented by David, (2006) As Lazarus and Folkman reminded us (1987), the evaluations of the individual in question, of the event, is very important. The primary evaluation, according to these authors represents the evaluation of the threat posed by the event. Cognitive schemes intervene in the realization of the reality of this primary evaluation. Therefore, automatic thinking, the irrationality of thought and unconditional acceptance, frustration tolerance, play a mediating role in emotional distress.

Although in the last two decades emotional distress was studied according to the rational emotional behavioral theory and the role of mediators such as irrationality was shown, named personality variables such as neurosis, locus of control, self confidence, the problem of psychological mediators of emotional distress for teachers still remains partly unsolved and therefore elaborating programs of efficient distress management is also difficult. Bermejo-Toro și Prieto Ursua (2006) underlining the connection between irrational cognition emotional exhaustion, somatic, depression and in a lower order anxiety.

The study in question aims to approach the problem of emotional distress for teachers from the basic educational level, and more specifically, identify some important mediators which appear in the connection between stress agents, distress and the interaction between them, with hopes to offer an alternative for a more efficient stress management for teachers.

The study hypotheses were suggested by numerous conclusions of the study of the expert literature and the personal experience obtained through the annual psychological evaluation of teachers:

Hypotheses 1. The emotional distress level is heightened at over 10% of the basic educational level teachers;

Hypotheses 2. The high level of distress correlates positively with the female gender and seniority in the field;

Hypotheses 3. The high level of distress correlates positively with the presence of irrational thinking;

2. Method

2.1. Participants

During the present undertakings a number of 834 teachers were selected within the ages of 22 and 55. The range is as follows: 41% under 35, 36% between 36 and 45, 24% over 46 (the medium age being 35,6). Teachers participating in the study were divided into five categories, based on seniority.

From the gender perspective within the total number of participants 186 people were men (22,3%) and 648 women (77,7%). The research took place during April – September 2010, in schools from Mures, Harghita, and Covasna. The sampling method was non-random, pseudo-random or convenient, available participants being used. This situation was created from a practical point of view. The participants were asked to reply in writing.
2.2. Instruments

In view of validating the hypotheses and attaining the objectives we applied several instruments:

- The Profile of Emotional Distress – PED. The internal consistency of PDE scales ranged from .75 to .94, and the reliability ranged from .75 to .81 (Opris & Macavei, 2007).
- Automatic Thought - The Romanian short version of Automatic Thoughts Questionnaire (ATQ; Hollon & Kendall, 1980);
- Rational and irrational beliefs - Scale II (ABS II). The Romanian version ABS has an internal consistency ranging from .60 and .87 (Macavei, 2002).

2.3. Procedure

The study took place during April – September 2010. The statistical analysis was achieved with the aid of the SPSS 17 program using the descriptive statistics – percent frequency analysis, correlation, histograms and the multi-nomination logistic regression.

3. Results

In order to verify the hypothesis we processed the obtained data by applying the PDE scale, using the descriptive statistics – percent frequency analysis. Only 7.9% of the evaluated teachers reported a high level of emotional distress.

In conclusion, all this data does not permit the confirmation of the hypothesis connected to the incidence of over 10% of emotional distress among basic educational level teachers.

Hypothesis 2: The first phase – analyzing the correlation between stress and the other three variables we didn’t identify significant statistic values (Table 1).

The same results were obtained with the Pearson Correlation. Through the histograms however, we identified that male teachers with seniority between 11 and 20 years show the highest level of distress, whereas female teachers with the same seniority show the lowest levels of emotional distress. Also, female teachers with seniority between 21 and 30 years show the highest level of emotional distress whereas male teachers with the lowest levels of emotional distress have seniority between 6 and 10 years.

Table 1 - Correlation distress - gender-age- seniority

<table>
<thead>
<tr>
<th>Spearman ro</th>
<th>Gender</th>
<th>Age</th>
<th>Seniority</th>
<th>Distress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.000</td>
<td>-.040</td>
<td>-.040</td>
<td>-.040</td>
</tr>
<tr>
<td>Age</td>
<td>-.040</td>
<td>1.000</td>
<td>.751**</td>
<td>.037</td>
</tr>
<tr>
<td>Seniority</td>
<td>-.047</td>
<td>.751**</td>
<td>1.000</td>
<td>.024</td>
</tr>
<tr>
<td>Distress</td>
<td>-.045</td>
<td>.037</td>
<td>.024</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)**

The multi-nomination logistic regression confirms that the seniority variable and the gender variable are the best predictors for emotional distress. More precisely the most powerful predictor of low distress is seniority between 10 and 20 years \( b =-1.323 \) and the female gender variable. In other words, female teachers with seniority between 10 and 20 years are the least stressed.

In conclusion all these results did not permit the confirmation of the hypothesis related to the correlation of high emotional distress levels with the female gender.
The hypothesis related to the correlation between seniority and emotional distress is partially confirmed in the sense that low level of distress is associated with low seniority and high level of distress is associated with seniority between 20 and 30 years in general and between 10 and 20 years for male teachers.

Hypothesis 3: The high level of distress correlates positively with the presence of irrational thoughts

In order to verify this hypothesis we processed the data from the Automatic Thought Questionnaire (Hollon and Kendall 1980), the attitude and beliefs scale and PDE.

The results obtained through the frequency percent are interesting: 41% have a high level of irrationality and high rationality is present at 24, 8% of those investigated. Also, a high level of high automatic thoughts was identified at only 11, 2% of those investigated.

The table below (Table 2) proves the existence of certain powerful positive correlation between irrationality and automatic thought. Going further with the result analysis we identify powerful positive correlation between high levels of irrationality and high levels of emotional distress.

Table 2 Correlations: distress- Automatic thought- Irrationality-rationality

<table>
<thead>
<tr>
<th></th>
<th>Distress</th>
<th>Automatic thought</th>
<th>Irrationality</th>
<th>Rationality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distress</td>
<td>1,000</td>
<td>-.422**</td>
<td>-.175**</td>
<td>-.000</td>
</tr>
<tr>
<td>Automatic thought</td>
<td>-.422**</td>
<td>1,000</td>
<td>.105**</td>
<td>.024</td>
</tr>
<tr>
<td>Irrationality</td>
<td>-.175**</td>
<td>.105**</td>
<td>1,000</td>
<td>.076*</td>
</tr>
<tr>
<td>Rationality</td>
<td>-.000</td>
<td>.024</td>
<td>.077*</td>
<td>1,000</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed)

Based on the gender variable we have identified significant correlations between the high level of irrationality and the female gender, as well as the low level of irrationality and the male gender.

The histograms allow us to point out high levels of distress for the subjects which present low irrationality but a high level of automatic thinking and the presence of irrationality especially among female teachers who are over 46 years old and male teachers with ages between 36 and 45 years. However automatic thinking is present among male teachers who are over 46 years old.

The correlation did not significantly identify the correlation between automatic thinking and the gender variable; however it identified the presence of certain powerfully positive correlations between age and automatic thinking. \( r = 0.12, \, df = 832, \, p = 0.001 \).

The presence of a high level of automatic thinking correlates in a strong positive way with ages up to 35 \( r = 0.10, \, df = 832 \) and a low level of irrationality correlates in a strong positive way with up to 5 years of seniority in the field \( r = 0.86, \) age up to 35, \( = 0.84, \) the male gender variable, \( r = 0.75, \) and low automatic thinking \( r = 0.11 \). Also, high automatic thinking correlates in a strong positive way with the male gender \( r = 0.1, \) and a medium level of automatic thinking correlates with the female gender \( r = 0.10 \).

The obtained results through multinomial logistic regression allow us to conclude that the predictors which best differentiate low distress are low automatic thinking with a coefficient of \( b = 3.361 \) and irrationality 0 with a coefficient of \( b = 1.657 \). In conclusion, all this data allows us to validate the hypothesis in a sense that there is a strong positive correlation between irrationality and emotional distress.
4. Conclusion

In ascertaining the comprehensive study conducted on a sample of 834 teachers in Mures, Harghita and Covasna counties, we identified a high level of emotional distress in only 7.9% of investigated teachers. Certain inconsistent results with other studies are explained in the context given (See study ascertaining limits). Here are some of them: the teachers investigated male teachers with seniority in teaching between 11 and 20 have the highest levels of emotional distress. The strongest predictor of emotional distress is low automatic thinking with a coefficient of $b = 3.361$ and irrationality 0 with a coefficient of $b = 1.657$.

We can afford to be reluctant in data interpreting and generalising. There are several reasons that render the validity of our investigations limited. Needs to be mentioned that the application was made with instruments that have contractual relationships with schools for three years in order to achieve annual psychological evaluation and teachers investigated. We know from the role perspective, which involves evaluating the emotional and mental health, and believe that there is a likelihood of association of the two situations and therefore teachers showed a tendency to provide emotional and mental states conducive to good. For future research the limits of our investigation need to be taken into account, the investigation of larger samples of teachers from both urban and from rural areas of different types of schools and different areas of the country.

The results of the study could stand as foundation for the implementation of efficient distress management programs able to intervene in the cognitive evaluation processes, namely the intervention through rational emotiveness and behavioral education.

References


