

ICEEPSY 2014

Correction of burnout in teachers

Zabira Madaliyeva^{a*}, Aigerim Mynbayeva^b, Zukhra Sadvakassova^c, Manzura Zholdassova^d

^{a,b,c,d} *Kazakh National University of al-Farabi, Al-Farabi ave. 71, Almaty, 050038, Kazakhstan*

Abstract

The article presents the results of study confirming the hypothesis of the research on possibility of reducing the level of the emotional burnout of a teacher and increasing the productivity of his activity by means of special training, with a view to improving the emotional competence. The correctional program of teachers' training to regulating the emotional state included having by teachers three interrelated programs: included the passage of the teachers of three interrelated the scientific-practical course «Peculiarities of the emotional sphere of a personality», training of the teacher's emotional competence development, the program of teachers' training to the mental self-regulation. After comparing the results of the experimental and control groups, it became possible to draw conclusions about the influence of the corrective training on the efficiency of the pedagogical activity and positive changes in the emotional sphere of a person. The results obtained by the questionnaire on the emotional intelligence testify to the positive dynamics of developing the emotional skills in the experimental group. Such skills as emotional awareness control of the emotions, self-motivation, i.e. deliberate control of his emotions, the empathy level, recognition of other people's emotions, i.e. the ability to influence the emotional state of other people. The significant differences between the average grades of the experimental group were received by the scales as well: neurotic state ($t = 3,112$, $p < 0.01$, $\delta = 1,43$, $\delta = 1,37$), spontaneous aggressiveness ($t = 3,010$, $p < 0.01$, $\delta = 0,84$, $\delta = 0,87$), depression ($t = 2,966$, $p < 0.01$, $\delta = 0,96$, $\delta = 0,88$), reactive aggressiveness ($t = 3,001$, $p < 0.01$, $\delta = 0,94$, $\delta = 0,62$). Changes are statistically important. In the control group, changes took place as well, but the essence of differences between the average grades was not statistically significant. Upon completion of training the indicators by symptoms are as following: the experience of psycho-traumatic circumstances, dissatisfaction with you, "oppressed state", anxiety and depression, inadequate selective emotional reaction, emotional deficit, emotional detachment, psychosomatic and psycho-vegetative disorders decreased at the statistically significant level. The comparative analysis of the data obtained in the experimental and control groups, confirms our assumptions about the possibility of reducing the level of the emotional teacher's burnout and increasing the productivity of his activities through special training, with a view to improving his emotional competence.

© 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the Organizing Committee of ICEEPSY 2014.

Keywords: emotional burnout; emotional competence; corrective training; teaching;

*Z. Madaliyeva. Tel.: +7-701-981-7882

E-mail address: madaliyevaz.b@bk.ru

1. Introduction

In terms of implementing the principles of a student-centered learning, of particular actuality, in our view, becomes the study of factors preventing the humanization of the relationships in the dyad «teacher-pupil», one of which is a syndrome of emotional burnout.

The term "emotional burnout" was introduced by the American psychiatrist H.J. Freudenberg in 1974 to describe the psychological state of healthy people who are in the intensive and close contact with customers, patients in the emotionally rich atmosphere when providing the professional assistance. Initially the term was defined as a state of exhaustion, malnutrition, with a feeling of his own worthlessness (Freudenberg HJ, 1974). By 1982 more than one thousand articles on the term "emotional burnout" have been published in the English literature. Studies presented in these articles were mostly of the descriptive and episodic character. Initially, a number of professionals who were referred to the subject "emotional burnout" was insignificant. They were employees of medical institutions and different charitable organizations. Then a group of professional risk is expanding: first of all, they are teachers, police officers, lawyers, prison staff, politicians, managers of all levels.

However, the researches of a burnout syndrome nowadays remain as actual as before, despite the fact that according to calculation of W.B. Schaufeli (Schaufeli, W.B., 2009, C. Maslach (Maslach, C, 2001), J. Halbesleben (Halbesleben, J.R, 2004) more than 6.000 books, chapters of dissertations and journal articles containing publications or any mentioning of a burnout were published.

After the phenomenon has become universally recognized, naturally, a question about the factors that contribute to the development or, on the contrary, hinder it has been raised. Traditionally they were divided into two large blocks: peculiarities of professional activities and individual characteristics of the professionals themselves. V.E. Oryol calls these factors as external and internal or personal and organizational (Oryol V., 2001). Considering the content aspects of the activities as independent, T.V. Formanyuk distinguishes personal, role –playing and organizational factors of the emotional burnout (Formanyuk T, 1994).

Boiko V.V. highlights a number of reasons that provoke the emotional burnout: conditions of the physical environment, content of work and socio-psychological conditions of activities are the most important in the field of burnout research (Boiko V, 1999) C. Maslach stresses that burnout is not the loss of creativity, not a reaction to boredom, but the "emotional exhaustion that occurs because of the stress caused by interpersonal communication" (Vodopyanova, N. Starchenkova, E, 2009, p.44).

N.E. Vodopyanova and E.S. Starchenkova defined "the emotional burnout syndrome" is a multidimensional construct that includes a plurality of the negative psychological experiences and maladaptive behavior as a consequence of prolonged and intensive stresses of communication" (Vodopyanova N., Starchenkova E, 2009, p. 333). They also add that " it is a set of persistent symptoms which manifest themselves in the negative emotional feelings and attitudes to their work (occupation) and subjects of business communication "(Vodopyanova N., Starchenkova E, 2009, p. 332).

D.W. Law with the help of method of MBI-HSS (Maslach Burnout Inventory-Human Services Survey) individually modified version of the MBI studied the burnout of students who learned business. He pointed out that the three-component model of the burnout syndrome is valid towards them as well. So, according to the results of the research these students showed the extreme level of burnout before the final examinations (D.W. Law, 2010).

The results of the literature analysis show that three-dimensional description of the burnout syndrome is used in the majority of scientific research that is meant by the MBI method. Yet some alternative methods of burnout appear, such as Oldenburg Burnout Inventory (Demerouti et al., 2002) and Copenhagen Burnout Inventory (Kristensen et al., 2005) however, MBI method remains the «golden standard» for evaluating this condition.

The professional deformation of education can manifest itself in the various aspects, preventing from the full control over the educational process, as well as preventing from the formation of the professional team. The majority of teachers in this situation discover in themselves the existence of mental states, destabilizing the professional activity (Madaliyeva Z., 2007).

As observations show the syndrome of emotional burnout is characterized by the teacher's emotional coldness, broadening the sphere of economy of emotions, personality's detachment, ignoring the individual features of students and in addition has a rather strong impact on the nature of the professional communication of teachers. From practice we know that negatively colored emotional teachers' state reduce the effectiveness of training and education, increase likelihood of the conflict situations in the teaching staff and lead to the professional deformation.

These and other analyzed phenomena have allowed to formulate a hypothesis about the possibility of reducing the level of the emotional teacher's burnout and increasing productivity of his activity by means of special training, with a view to improving the emotional competence, ad hoc study was conducted on the basis of the corrective training. Psycho-diagnostic measurements were carried out twice: before the beginning of the correctional training and after its having.

Objective: to study the impact of corrective training, aimed at the improvement of emotional competence, on reducing the level of emotional teachers' burnout.

2. Methods

Different methods were used in the research. They are: 1. the method of burnout by V.V. Boiko is designed to measure the level of symptoms of the emotional burnout. The method consists of a questionnaire, which includes 84 judgments. Interpretation of the results is carried out in three phases, including 4 symptoms.

2. Method of evaluating "the emotional intelligence" (IQ questionnaire). N. Hall suggests the method for determining the ability to understand the relationships of the personality represented in the emotions and to control the emotional sphere based on decision-making. It consists of 30 statements and contains five scales: emotional awareness, control of his emotions (it is rather an emotional recovery, emotional non-rigidity) self-motivation (rather, it is just the deliberate control of his emotions, excluding item 14), empathy, recognition of other peoples' emotions (rather it is the ability to affect the emotional state of others).

3. Freiburg Personality Inventory (Das Freiburger Persönlich keitsinventar, Freiburg Personality Inventory, FPI-B). The scales of questionnaire were based on the results of factor analysis and reflect the combination of interrelated factors (Vansovskaya et al, 1997). This is a multi-factor personality questionnaire, suitable for diagnosis of some important personality traits. It has 12 scales. We took data on the following scale: neurotic state, spontaneous aggressiveness, depression, irritability, reactive aggressiveness, balance and emotional liability. The questionnaire aimed at identifying the successful training (Madaliyeva, 2009). The questionnaire consists of six items, each of which is composed of a question and space for an answer in the form of a seven-point scale, or just a blank space to put an answer to an open question.

Mathematical methods: to determine how great the influence of the corrective training on reducing the level of the emotional teachers' burnout and increasing the emotional competence was, the credibility analysis of differences of all indicators according to the parametric t – Student criterion was carried out and the correlative analysis was used as well.

3. Procedure

The developed model of the teacher corrective training to regulation of the emotional state involves learning by teachers three interrelated programs: the scientific- practical course "Peculiarities of the personality's emotional sphere," training of teachers' emotional competence, teacher training program of mental self-regulation. Getting to the development of the model, we have tried wherever possible to check carefully the grounds on which it is created as well as to clarify the objectives and methods of its construction. The starting point for us was the number of the scientific-theoretical and organizational-methodological regulations of the modeling theory:

1) Experimental model of the corrective training to the methods of regulating the emotional state should be focused not only on the qualitative but on the quantitative analysis of the results as well, because the model would serve as a connecting link between the total effect (emotionality of the pedagogical activity) and measuring it in the correct ratio (achievement of a certain level of the emotion of the pedagogical activity);

2) experimental model of the corrective teaching to the methods of regulating the emotional condition should be based on the unity of the processes of activity and consciousness, (S.L. Rubinstein, A.N. Leontiev);

3) experimental model of the corrective training to the methods of regulating the emotional state has the static and dynamic components. The static component is represented by a system of «objective -content – technology-result», and the dynamic component- by the system of stages of the educational process, aimed at achieving a particular goal.

We have highlighted the following stages of the experimental correctional teacher training to the regulation of emotional state:

- Initial, diagnostic stage, aimed at the theoretical and empirical teaching of principles of the emotional educational activities in the course of studying the special subject "Peculiarities of a personality's emotional sphere."

- Integrating stage, aimed at structuring the or ethical knowledge and practical skills in the course of having training, construction of an envision by the teacher of his emotional – expressive status and his energy potential (training of the emotional competence development).

- transformative stage, aimed at mastering the methods of self-regulation or self-interaction in the course of teaching the mental self-regulation and its further testing in the process of independent teaching activities (teaching of mental self-regulation PSR) (Madaliyeva Z., 2009).

The presented model of the corrective training was tested at the teachers' seminars for improving qualification and schools. 240 people participated in the experiment (120 people- in the control group and 120 people - in experimental group). Experimental and a control group of the tested people were aligned in accordance with age and socio - educational grounds:

- the age of the subjects ranged from 30 to 45 years;
- the number of subjects: in the experimental group - 120 people, in the control group - 120 people; all subjects had a higher education.

4. Results of research

The purposeful development and improvement of the emotional competence was not a part of the learning task in the control group. Based on comparison of the results of the experimental and control groups it is possible to draw conclusions about the impact of the corrective training on the efficiency of education and positive changes in the emotional sphere of a person. Diagnostics of peculiarities of the emotional sphere of teachers' personality was conducted twice: before the start of the experiment and after it. Interpretation of the results.

Data received according to the Freiburg personality multi-factor test which was conducted twice (before and at the end of the experiment) have shown that there have been changes in the emotional personality traits in the control and experimental groups. The obtained results are shown in table 1.

Table 1. Data showing the dynamics of emotionality during the training

Name of scale	Before the experiment		After the experiment	
	Experimental	Control	Experimental	Control
Neurotic state	6,9	6,6	5,5	6,6
Spontaneous aggressiveness	6,7	6,7	5,4	6,6
Depression	3,6	3,5	2,9	3,1
Irritability	7,8	8,1	6,5	7,5
Reactive aggressiveness	4,2	4,0	3,6	4,0
Balance	3,6	3,8	6,1	4,2
Emotional liability	7,2	7,4	6,2	7,0

So, if prior to the experiment the experimental group showed high scores on scales: irritability, emotional liability then after training they became average. The changes are statistically significant at level ($p < 0.01$). We used the t- Student criterion. In addition the significant differences between the average scores of the experimental group were received by indicators: neurotic state ($t = 3,112$, $p < 0.01$, $\delta = 1,43$, $\delta = 1,37$), spontaneous aggressiveness ($t = 3,010$, $p < 0.01$, $\delta = 0,84$, $\delta = 0,87$), depression ($t = 2,966$, $p < 0.01$, $\delta = 0,96$, $\delta = 0,88$), reactive aggressiveness ($t = 3,001$, $p < 0.01$, $\delta = 0,94$, $\delta = 0,62$).

Changes were statistically essential. In the control group, changes have taken place as well, but the significance of differences in average values are not statistically important. The results obtained by the emotional intelligence, testify to the positive dynamics of the development of emotional abilities in the experimental group. They are emotional awareness, control of his emotions (it is rather the emotional recovery, emotional non-rigidity), self-motivation, i.e. the arbitrary control of his emotions, empathy level, recognition of other people's emotions, i.e. the ability to affect the emotional state of others. The great changes in the control group were not found.

Table 2. Indicators of the emotional intelligence according to the IQ questionnaire in the experimental group

Indicators	Average score before classes	Average score after classes	Student's t-criterion
Emotional awareness	2,6 81,31	5,5 81,09	6,53 $P < 0,01$
Control of the emotions	2,2 80,91	5,7 80,93	10,53 $P < 0,05$
Self-motivation	2,5 81,20	6,2 81,17	8,47 $P < 0,05$
Empathy	2,6 81,14	4,9 81,31	5,05 $P < 0,01$
Recognition of emotions of people around	2,5 81,021	5,3 81,61	5,68 $P < 0,01$

Statistically reliable differences were obtained by all indicators of this questionnaire.

The data obtained by V.V. Boiko method of the emotional burnout, shows that the most developed symptoms of emotional burnout (16 points and above) were the following: inadequate selective emotional response, emotional deficit, personal detachment. The symptoms are the emotional detachment and psychosomatic and psycho-vegetative disorders (their performance more than 20) are referred to the dominating in the whole syndrome of the emotional burnout.

Table 3. Change of the average indicators of the «emotional burnout» of teachers

Phases	Parameters of grade point	Average score before classes	Average score after classes	Student's t-criterion
Phase "Tension"	Experience of psycho-traumatic circumstances	12,9	10,6	3,084**
	Dissatisfaction with yourself	10,5	9,46	2,19*
	«Oppressed state in a cage»	13,3	11,2	3,21**
	Anxiety and depression	15,5	13,3	3,41**
Phase "Resistance"	Inadequate selective emotional response	16,3	14,8	2,48*
	Emotional and moral disorientation	13,2	12,8	0,84
	Broadening the sphere of the economy of emotions	5,82	5,41	1,21
	Reduction of the professional duties	12,4	11,2	1,88
Phase "Exhaustion"	Emotional deficit	16,1	14,9	2,26*
	Emotional detachment	20,4	18,3	4,29***
	Personal detachment (depersonalization)	19,1	18,6	0,94
	Psychosomatic and psycho-vegetative disorders	20,5	19,1	2,42*

NOTE. Asterisks denote significant differences: * - significance level 0,95; ** - significance level 0,99;

*** - significance level 0,999.

Upon completion of training the indicators on symptoms are: experience of psycho-traumatic circumstances, dissatisfaction with yourself, "oppressed state", anxiety and depression, inadequate selective emotional response, emotional deficit, emotional detachment, psychosomatic and psycho-vegetative disorders went down to a statistically significant level. The effectiveness of this training was checked with the help of information, reflecting the responses of the participants about the success of training, collected with the help of questionnaire. The questionnaire may be presented to the participant before the training, immediately after its finishing and some time later. The questionnaire consists of 6 points. The information obtained in this way, provide the in-depth comprehension of those processes that produce these or other effects of the training.

The coach gets an opportunity to link the evaluation of different parts of the program with their content and in a more focused way to search the reasons of these or those effects. In addition, tracking the dynamics of assessments for the observed period of time helps to separate the effects caused by one or another training program, from the effects, caused by the group-dynamic processes. In the course of implementing this training, there was conducted the analysis of the participants' responses on some particular training sessions of 50-hour program.

At the end of each day, the participants filled out a short form of six points, each of which consisted of a question and space for an answer in the form of a seven-point scale, or just an empty space for writing down the answer to the open question. In this questionnaire there are several issues, when the analysis of the answers allows finding out the opinions of the participants about the some parts of the training procedures. Hereby, besides the general evaluation the degree of emotional involvement is determined as well. The second meaningful moment is the inclusion of issues that allows monitoring the «hysterical reactions» of the separate participants of the training.

The idea of detecting this type of reactions is based on the comparison of the answers to the questions like this «How much have you contributed to the group? » and «How much have you received from the group? ». It is believed that a man, who says that he gave the group more than he received from it, demonstrates by it his particular emotional state. The analyzed groups of people made the scorecards, received from 60 people from four training groups. The average values for each item were calculated according to the days within each particular group. The coefficients of correlation were calculated between the all estimated parameters as well. The relationship between the indicators is presented in the table of inter correlations for all estimations made by the participants of four training groups.

Table 4. Results of the correlation analysis of the participants' opinions of four training groups

	Involvement	State of health	Contribution to the group	Output from the group	Effectiveness	hysterical reaction
--	-------------	-----------------	---------------------------	-----------------------	---------------	---------------------

Involvement						
State of health	0,60					
Contribution to the group	0,74*	0,68*				
Output from the group	0,92**	0,79*	0,85**			
Effectiveness	0,93**	0,93**	0,80**	0,93**		
hysterical reaction	- 0,65*	-0,14	- 0,49	-0,62	- 0,72*	
number of participants	- 0,83**	-0,42	- 0,71*	-0,76*	- 0,78**	0,85

(*- significance level of 0.05 **- significance level of 0.01).

The obtained data allow us to outline the range of optimality for the quantitative structure of the training groups. The first thing to note is that for the different indicators (and therefore the aspects) of success these borders are not placed in the identical way. So, for the item “Involvement “it seems that there is no this range, and a simple principle works here «the less, the better», at least, starting with eight participants. As for the item «state of health», this indicator starts to react to the change of quantitative structure only when approaching to two dozens of participants. For the other three indicators (“performance”, «contribution to the group» and «output from the group») the border of optimality is seen in the range of 12-15 people

Such questions as «mood prior to the classes» and «mood after classes» have been introduced into the item «state of health», and the total assessment of the items «efficiency» was replaced by such its components of the assessments as «clarity», «interesting», «necessity», i.e. questions like «How well I see and understand it all ?» «How interesting and exciting it was?» «How necessary and useful the material was?» Practically all indicators of the training success in the predictable and essential way turned out to be connected with the number of participants of the training groups, and when correlating the size of the group with such indicators as «total effectiveness» and «involvement» the level of coefficients significance exceeded the level of 0.01. The only exception was the relationship between a number of the participants and assessments of “state of health”. In this case the volume of the coefficient does not reach the level of 0.05, though the sign of the connection testifies to the loyalty of the forecast.

There is a clear enough tendency to evaluate higher his emotional satisfaction from work at the training, if the group is small. The same situation is also with the assessments on the item «how interesting and exciting it was ». The participants tend to evaluate training as a more interesting one with a smaller number of people in the group. Re-testing with the use of the all above-mentioned methods was held a month later. The obtained results were reliable at 5 % level of accuracy that once again testified to the effectiveness of the proposed program of study.

5. Conclusions

The comparative analysis of data obtained in the experimental and control groups confirms our assumptions about the possibility of reducing the level of emotional burnout of the teacher and increasing the productivity of his activity by means of special training, with a view to improving the emotional competence.

References

- Formanyuk T.V. (1994) *Syndrome of the «emotional burnout» as an indicator of the professional disadaptation of teachers*// Psychological issues. № 6, pp. 57-59.
- Oryol V.E. (2001) *Phenomenon of «burnout» in the foreign psychology: empirical studies and prospects*// Psychological journal. vol.22, №1, p.67.
- Boiko V.V. (1999) *Syndrome of “emotional burnout” in the professional communication*. SPb., p. 231
- Demerouti, E., Bakker, A., Vardakou, I., Kantas, A. *The convergent validity of two burnout instruments: a multitrait-multimethod analysis* / E. Demerouti, A. Bakker, I. Vardakou, A. Kantas (2002) *European Journal of Psychological Assessment*. – Vol. 18. – P. 296-307.
- Halbesleben, J. R., Buckley, M. R. (2004) *Burnout in organizational life* / J. R. Halbesleben, M. R. Buckley // *Journal of Management*. - Vol. 30. – P. 859-879.

- Kristensen, T. S., Borritz, M., Villadsen, E., Christensen, K.B. (2005) *The Copenhagen burnout inventory: a new tool for the assessment of burnout* / T. S. Kristensen, M. Borritz, E. Villadsen, K. B. Christensen // J. Work and Stress. – Vol. 19. – P.192-207.
- Law, D. W. (2010) *A measure of burnout for business students* / D.W. Law //Journal of education for business. — Vol. 85. – P. 195-202.
- Freudenberger H.J. (1974) Staff burn-out// Journal of Social Issues.V .30. P.159
- Maslach, C., Schaufeli, W.B., Leiter, M.P. (2001) *Job burnout* / C. Maslach, W.B. Schaufeli, M.P. Leiter // Annual Review of Psychology. - Vol. 52. – P. 397-422.
- Schaufeli, W.B., Enzmann, D. (1998). *The Burnout companion to study and research : A critical Analysis* / W.B. Schaufeli, D. Enzmann. – London : Taylor & Francis.
- Schaufeli, W. B., Leiter, M. P., Maslach, C. (2009) *Burnout : 35 years research and practice* / W.B. Schaufeli, M.P. Leiter, C. Maslach // Career Development International. – Vol. 14, №3. – P. 204-220.
- Vodopyanova N., Starchenkova E. (2009) *Burnout syndrome: diagnosis and prevention*. 2nd Edition / N. Vodopyanova, E. Starchenkova - SPb.: Peter. p. 336.
- Madaliyeva Z.B. (2007) *On the emotional regulation in the educational process* //Higher school of Kazakhstan. № 3., p.127-130.
- Madaliyeva Z.B. (2006) *Self-regulation of mental states in the pedagogical activity*. / / Vestnik KazNU. A series of psychology and sociology. №1 (16).- Almaty: Kazak University, p. 65.