

Conference Paper

Features of Professional Health of a Teacher at Different Stages of Professional Development

Anna Pecherkina and Rustam Muslumov

Ural Federal University named after the first President of Russia B. N. Yeltsin (RUSSIA, Yekaterinburg)

Abstract

The article presents the results of a study of the professional health of a teacher at different stages of professional development. 270 school teachers participated in the study. The research methods were selected in accordance with the defined components of the teacher's professional health: motivational (questionnaire "Motivation for success" (T. Ehlers), questionnaire "Motivation to avoid failures" (T. Ehlers)), emotional (questionnaire «Self-assessment of emotional states» (H. Eysenck), questionnaire «Empathy» (A. Mehrabyan)) and reflective (differential reflexivity test (D.A. Leontiev, Y.N. Osin), method of the diagnostic of the development level of reflexivity (A.V. Karpov)). The sample was divided into groups in accordance with the stages of professional development: 0 to 5 years of work experience in school - the adaptation stage; 6 to 15 years - primary professionalization; 16 to 25 years - secondary professionalization; over 25 years - mastery.

It is established that the motivational component of a teacher's professional health is characterized by a moderately high and average motivation for success and a high and very high level of avoidance of failures. The emotional component of a teacher's professional health is characterized by a low level of frustration and aggressiveness, a high level of anxiety and an average level of rigidity and effective empathy. The reflective component of a teacher's professional health is characterized by average indicators of the level of development of reflexivity and systemic reflection, as well as low indicators of introspection and quasi-reflection. As professional development occurs, the intensity of the indicators of motivational, emotional and reflective components of a teacher's professional health changes. It is characterized by increasing motivation for success, increased level of anxiety, increased level of rigidity, development of systemic reflection.

Keywords: health, teacher's professional health, teacher's professional health structure, motivational component of teacher's professional health, emotional component of teacher's professional health, reflective component of teacher's professional health

Corresponding Author:

Anna Pecherkina
79apa@mail.ru

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1. Introduction

The need to study the professional health of a teacher is due to the current changes in the education system. In the face of constantly changing requirements for the content and the level of a teacher's qualification, the time spent on preparing for classes increases, the tension and workload rise, and the emotional deterioration of a teacher is observed. As a result, many teachers feel irritability, exhaustion, fatigue, a sense of unrealized opportunities, social and professional loneliness by the end of the school year. These are characteristic signs of a negative change in their professional health.

The concept of "professional health" is among the most complex and relevant phenomena, many aspects of which are still debatable.

At the moment there is no unambiguous definition of the phenomenon of "professional health". At the same time, many authors consider health an important resource of successful professional life and the main indicator of the effectiveness of the professional activity of an employee (G.G. Verbina, T.N. Gorobets, E.F. Zeyer, E.R. Kaliteyevskaya, L.M. Mitina, G.S. Nikiforov, Y.M. Orlov, E.E. Symanyuk and others).

The profession of a teacher is of tremendous social importance, since it assumes a great responsibility not only for the education and upbringing of children, but also for their health. According to L.M. Mitina, professional health of a teacher is the basis for effective work of the modern school [5].

According to N.K. Smirnov, Russian teachers suffer from the shortcomings of the Russian education system. "Low income, low social status of a teacher, neurotic nature of work in school - all of it leads to a progressive deterioration in health, especially after 10-15 years of work in school" [6, c. 260].

O.F. Zhukova and N.S. Rossoshanskaya indicate that 96% of teachers consider the specifics of their professional activity (related to overstrain, overload, psychotraumatic factors, etc.) the main cause of their health problems. The factor of low physical activity is in the second place (68%), followed by social factors (lack of a decent system of social support, low wages) - 56% and 64% respectively. Many teachers (32%) note the lack of special knowledge on the prevention of occupational diseases. 48% see the causes of illness in the absence of timely access to the doctor and in the absence of systematic preventive examinations (24%) [1].

The study of working conditions and their relation to health and well-being, conducted on a sample of teachers from different European countries within the framework of a large-scale intercultural study (EUROTEACH), indicates that physical stress and lack of social support affect the health of teachers and their satisfaction with the

performance of pedagogical activities, as well as the level of personal achievements. It is established that high demands lead to low job satisfaction, high emotional exhaustion and depersonalization [7–14].

In summary, this study defines the professional health of a teacher as the state of the organism that ensures the optimal level of efficiency, professional competence and constructive development of a teacher's personality at all stages of professional development for this type of activity.

In our opinion, consideration of professional health in terms of its component composition is most reasonable. It allows us to systematize and operationalize the studied concept. Based on the theoretical analysis of the literature and taking into account the specifics of a teacher's work, the main structural components of a teacher's professional health are: motivational (motivation to preserve professional health, high motivation to achieve success, low motivation to avoid failures), emotional (low anxiety, low aggression, high flexibility and low frustration, high empathy) and reflective (the ability to distance oneself and look at oneself from the side, to see the subject-pole and the object-pole simultaneously).

It is important to note that the professional development of a teacher covers a long time period - from the beginning of professional activity to its end. In this process, each teacher goes through the stages of professional adaptation, professionalization (primary and secondary) and mastery, the pace and trajectory of which are determined by biological and social factors, the personal activity of the individual, as well as by accidental circumstances, vital events and professionally conditioned incidents. These factors affect the professional health of a teacher to some extent at each stage of professional development.

2. Methods

The purpose of the study is to determine the characteristics of the professional health of a teacher at different stages of professional development.

270 teachers working in Ekaterinburg schools participated in the study (248 women and 22 men). The age of the participants - from 20-66 years old, the average age - 46,9 years old.

The sample was divided into the following groups in accordance with the stages of professional development identified by E.F. Zeyer [2, p. 66-67]:

- 0 to 5 years of work experience in school - the adaptation stage;

- 6 to 15 years of work experience in school - primary professionalization;
- 16 to 25 years of work experience in school - secondary professionalization;
- over 25 years of work experience in school – mastery.

Descriptive analysis and comparative analysis using Student's t-test were used for statistical data processing.

The psychodiagnostic toolkit was selected on the basis of the identified structural components of a teacher's professional health. As a result, the following package of psychodiagnostic methods was formed:

1. Questionnaire "Motivation for success" (T. Ehlers) (determines the level of intensity of motivation to achieve success).
2. Questionnaire "Motivation to avoid failures" (T. Ehlers) (determines the level of intensity of motivation to avoid failures).
3. Questionnaire «Self-assessment of emotional states» (H. Eysenck) (determines the level of intensity of such emotional states as anxiety, frustration, aggressiveness, rigidity).
4. Questionnaire «Empathy» (A. Mehrabyan) (measures such components as empathy and effective empathy).
5. Differential reflexivity test (D.A. Leontiev, Y.N. Osin) (determines the intensity of such types of reflection as systemic reflection, quasi-reflection, introspection).
6. Method of the diagnostic of the development level of reflexivity (A.V. Karpov) (determines the level of development of reflexivity).

The study relied on the works on the professional health psychology of G.S. Nikiforova, V.A. Ponomarenko, A.G. Maklakova, L.M. Mitina, as well as on the works of A.R. Luria in the field of the theory of activity and the system approach.

3. Results

The features of the professional health components in the general sample of teachers were determined at the first stage of the study.

It is established that the motivational component of a teacher's professional health is characterized by the predominance of moderately high (38.8%) and medium (40.2%) motivation for success. This indicates that most teachers are characterized by the lack

of a pronounced desire for excellence (including the process of pedagogical activity) and by the fact that the achievement of obvious attributes of success does not play a big role for them. Teachers who are moderately motivated for success prefer actions aimed at achieving the goal; they are persistent in achieving it, they expect success, but they are not completely sure whether they need it, so they prefer tasks of an average degree of difficulty.

It is established that this group is characterized by the predominance of a high and very high level of motivation for avoiding failures (61.2%). In most cases, this is manifested in self-doubt and lack of faith in the possibility of success, in fear of external evaluation and criticism. The work associated with a possible failure causes negative emotions among such teachers. They tend to ignore objective information about their abilities, have inadequate self-esteem (inflated or low) and, as a consequence, an unrealistic level of aspiration. Therefore, they are characterized by performing inadequate professional tasks - they prefer tasks that are either too easy (to avoid a possible failure) or too complicated (to justify a possible failure).

Thus, the motivational component of a teacher's professional health is characterized by moderately high and average motivation for success and a high and very high level of avoidance of failures. This indicates the lack of willingness to take risks, to achieve their own professional goals, as well as a pronounced uncertainty when they reach them.

The emotional component of a teacher's professional health is characterized by a predominance of a low level of frustration (57.2%) and aggression (44.3%). The average level of intensity dominates in the indicator "rigidity" (68.6%), while the high level of intensity prevails in the indicator "anxiety" (57.2%). Teachers live through negative emotional experiences; they tend to be frequently anxious and suspicious. They also have a tendency to be attached to the usual ways of doing things; they are unwilling to change anything in the process of performing pedagogical activity.

Prevalence of the average level of empathy (62.8%) and effective empathy (91.4%) should be noted. Teachers are characterized by the ability to empathize, to be emotionally impressionable. The lack of high values in the indicator "effective empathy" may indicate that, despite the ability to respond emotionally, teachers often do not show friendliness, support, and do not help others (students, parents, colleagues).

Thus, the emotional component of a teacher's professional health is characterized by a low level of frustration and aggression, a high level of anxiety and an average level of rigidity, empathy and effective empathy. This testifies to the teachers' inclination to display anxiety and to stay attached to already familiar and well-worked actions. At

the same time, they are characterized by the ability to understand the state of others, but it is not always acted upon.

Reflective component of a teacher’s professional health (Table 1) was analyzed in comparison with the normative indices of the differential reflexivity test [3].

TABLE 1: The results of empirical data on the Differential Reflexivity Test (D.A. Leontiev, Y.N. Osin).

Scale	Study (N=270)		Norm (N=3860)	
	Mean	Standard deviation	Mean	Standard deviation
Systemic reflection	39,44	4,70	39,58	5,15
Introspection	21,00	5,28	25,11	5,68
Quasi-reflection	19,30	5,45	27,39	5,69

The level of development of systemic reflection in the group of teachers does not exceed the average level (39.44 points). This indicates that teachers cannot always assess the results of their own or others’ activity correctly; sometimes they may have difficulties understanding the causes of actions of students. Accordingly, this can cause difficulties in building relationships with the students.

The intensity of the indicator “introspection” is below the average (21.00 points), which means that teachers are not prone to soul-searching and focusing on their own experiences.

Quasi-reflection is at a low level of intensity (19.30 points), which indicates that teachers tend to concentrate on objects that are relevant for them; they do not give into irrelevant thoughts.

Next, let us consider the results of studying the levels of reflexivity development, based on the method by A.V. Karpov [4].

The average level of development of reflexivity was revealed in the overwhelming majority of teachers (75.7%). This is manifested in the fact that teachers may have difficulty in establishing and analyzing the cause-effect relationships of actions (both their own and those of others). These teachers are not always able to evaluate their results objectively, sometimes it may be difficult for them to put themselves in the place of another and understand them.

14.3% of teachers have a high reflexivity. They are more inclined to turn to the analysis of their activities, to reveal the cause-effect relationships of their actions in the present, in the past and in the future.

10,0% of the teachers of the sample showed a low level of reflexivity development, which is manifested in a teacher’s difficulty in putting themselves in the place of another and regulating their own behavior.

Thus, the reflective component of a teacher's professional health is characterized by average indicators of the level of reflexivity development and systemic reflection, as well as low indicators of introspection and quasi-reflection. This shows that teachers have the ability to evaluate their activities objectively, they can put themselves in the place of another, and they understand the cause-effect relationships of their own and their students' actions.

The results were further analyzed depending on the stage of professional development of a teacher.

At the stage of professional adaptation, there are problems of mastering a particular profession, acquiring the experience of independent performance of professional activity. The central psychological problem at this stage is the development of the initial experience of performing professional activities. In the process of active self-mastery of professional activities, there is not only the development and integration of skills, the development of individual techniques and methods of performing work assignments, but also the development of professionally important qualities and abilities.

Moderate motivation for success (39%) prevails in the group of teachers who are at the stage of professional adaptation, that is, young teachers prefer an average level of risk. They are characterized by a very high level of motivation to avoid failure (62%), which is probably due to the lack of experience and which makes it difficult for young teachers to adequately determine the content and methods of performing professional tasks.

This group is dominated by teachers with a high level of anxiety (44%), which may also be due to lack of professional experience and, as a result, the fear of making a mistake in the performance of professional duties. At the same time, the level of rigidity (54%), aggression (63%) and frustration (77%) is low.

It should be noted that a low level of effective empathy (56%) prevails, which is manifested in a lack of ability to show friendliness, support and assistance.

Teachers at this stage of professional development have a low level of systemic reflection (48%), average level of quasi-reflection (33%), and high level of introspection (43%). This indicates that the focus of young teachers' attention is shifted to internal experiences; they often give into thoughts about objects that are not relevant to the actual professional situation. The majority of teachers of this group have the average level of reflexivity development (65.7%), which manifests itself in difficulties with the determination of the cause-effect relationships of people's actions and the objective evaluation of their results.

Professional competence and qualification become important at the stage of professionalization (primary and secondary) - highly qualified performance of labor activity. At this stage, there is an integration of professional skills and professionally important qualities into complex structural formations that ensure productive performance of professional activity.

The professional health of a teacher at the stage of primary professionalization is characterized by the average motivation for success (52%) and high motivation to avoid failures (58.5%).

Most of the teachers in this group showed high aggression (45%), average rigidity (39%), and low anxiety (44%) and frustration (52%). Perhaps this is due to the fact that professional fatigue begins to accumulate at this stage and teachers cannot always cope with it. As a result, it manifests in a negative form of aggression. At the same time, this group has a high level of empathy (51%), which is expressed in response to the state of another person (students, parents, colleagues), the ability to empathize and be emotionally impressionable.

All indicators of reflection are on the average level, namely: systemic reflection (54%), introspection (46%), quasi-reflection (41%). This indicates that teachers start evaluating their activities objectively and putting themselves in the place of another in the process of professional development. The development of reflexivity remains at the average level (72.8%).

At the stage of secondary professionalization, the majority of teachers have high motivation for success (41%), which is manifested in willingness to take risks. Motivation to avoid failures is also maintained at a high level (60%).

Most of the teachers in this group show average aggression (49%), average rigidity (42%), high anxiety (44%) and low frustration (57%). Perhaps this is a consequence of long, varied, complex situations of communication with students, parents and colleagues, as well as a frequent lack of positive feedback. As a result, this leads to constant tension, a sense of inability to cope with the situation, a constant state of anxiety.

The level of empathy remains high (58%).

The indicators of reflection are on the average level: systemic reflection (51%), introspection (48%), quasi-reflection (43%). The tendency to evaluate their activities objectively is preserved, the ability to put oneself in the place of another and see the cause-and-effect relationships of actions are developed. The development of reflexivity is also maintained at an average level (72.8%).

Achievement of a peak of professional skill is characterized by a high level of professionalism and an excessive performance of labor activity. But at the same time there is a risk associated with the fact that prolonged performance of professional activities can lead to various destructive manifestations.

The professional health of a teacher at the stage of mastery is characterized by high motivation for success (42%) and high motivation to avoid failures (58%). This group is characterized by low frustration (39%). The level of aggression decreases and becomes low in 36% of teachers. The level of anxiety remains high (47%), the rigidity of most teachers becomes high (42%). This is probably due to the fact that teachers at the stage of mastery have a wide professional experience related to the solution of various tasks, both within their subject and in the sphere of relationships with students. And this does not always allow them to be flexible in solving pedagogical problems, since their well-established experience often stops the development. But, at the same time, the constant stress does not allow them to relax. Teachers begin to display suspiciousness and unreasonable anxiety, which may be associated with the realization that the retirement from professional activity is approaching.

The level of empathy remains high (57%), as in the previous stage.

The level of introspection (46%) and quasi-reflection (45%) is low, the level of systemic reflection is high (44%). This indicates that teachers can properly assess the results of their own or others' activities, they do not have difficulties in building relationships with students, parents, colleagues and administration.

The development of reflexivity remains at an average level (72.8%).

A comparative analysis of groups (by stages of professional development) was carried out with the help of the Student's t-criterion to specify the obtained data.

It is established that a statistically significant increase in motivation for success is observed with every change in the stage of professional development. This may be due to the fact that the work experience, the accumulated experience of pedagogical activity and a certain position contribute not only to setting goals that are adequate to the teachers' capabilities, but also to achieving them.

The results of the comparative analysis show an increase in the level of anxiety and rigidity from the stage of adaptation to the stage of mastery. Perhaps this is due to the fact that, on the one hand, teachers become more confident in their professionalism after gaining work experience in school (they have more knowledge, experience, a higher position, etc.), but, on the other hand, the number and volume of tasks constantly increases and they are not always clearly defined, which causes anxiety and unwillingness to change anything in the process of performing pedagogical activity.

It is also established that systemic reflection increases from the stage of adaptation to the stage of mastery. Perhaps this is due to the fact that the experience gained over the years of work in this field allows teachers to develop a systemic reflection. Teachers learn to be more objective, they understand and analyze the cause and effect of various events occurring during pedagogical activity better.

4. Conclusions

1. The professional health of a teacher is represented by a combination of components that are characterized as follows:
 - the motivational component of a teacher's professional health is characterized by moderately high and average motivation for success and a high and very high level of avoidance of failures;
 - the emotional component of a teacher's professional health is characterized by a low level of frustration and aggression, a high level of anxiety and an average level of rigidity, empathy and effective empathy;
 - the reflexive component of a teacher's professional health is characterized by an average level of reflexivity and systemic reflection, as well as low introspection and quasi-reflection.
2. The specificity of the professional health of a teacher has been revealed depending on the stage of professional development. It is established that with the change of the stage of professional development, there are changes in the intensity of the indicators of the motivational, emotional and reflective components, which is manifested in the increased level of the motivation for success, as well as levels of anxiety and rigidity, and the increased level of the development of systemic reflection.

References

- [1] Zhukov O.F., Rossoshanskaya N.S. The professional health of a teacher // Scientific notes of the P.F. Lesgaft University, № 3(73). 2011. P. 75-78.
- [2] Zeyer E.F. Psychology of professions: a textbook for university students. 3rd ed., revised. M., 2005.

- [3] Leontiev D. A., Osin Y. N. "Good" and "bad" reflection: from the explanatory model to the differential diagnosis // Psychology. Journal of Graduate School of Economics. 2014. Vol. 11. № 4. P. 110-135.
- [4] Methods for diagnostics of reflexivity. Access mode: http://psihologia.biz/psihofiziologiya_801/metodika-diagnostiki-refleksivnosti-metodika-15055.html (date - 08.11.2016).
- [5] Mitina L.M. Psychology of professional development of teachers. M.: Flinta, 1998.
- [6] Smirnov N.K. Health-saving educational technologies and health psychology in school. – M.: ARKTI, 2005. 320 p.
- [7] Griva, K., & Joekes, K. (2003). UK teachers under stress: Can we predict wellness on the basis of characteristics of the teaching job?. *Psychology and health*, 18(4), 457-471.
- [8] Kittel, F., & Leynen, F. (2003). A study of work stressors and wellness/health outcomes among Belgian school teachers. *Psychology and Health*, 18(4), 501-510.
- [9] Sann, U. (2003). Job conditions and wellness of German secondary school teachers. *Psychology and Health*, 18 (4), 489-500.
- [10] Pascual, E., Perez-Jover, V., Mirambell, E., Ivanez, G., & Terol, M. C. (2003). Job conditions, coping and wellness/health outcomes in Spanish secondary school teachers. *Psychology and Health*, 18(4), 511-521.
- [11] Pisanti, R., Gagliardi, M. P., Razzino, S., & Bertini, M. (2003). Occupational stress and wellness among Italian secondary school teachers. *Psychology and Health*, 18(4), 523-536.
- [12] Pomaki, G., & Anagnostopoulou, T. (2003). A test and extension of the demand/control/social support model: Prediction of wellness/health outcomes in Greek teachers. *Psychology and Health*, 18(4), 537-550.
- [13] Rasku, A., & Kinnunen, U. (2003). Job conditions and wellness among Finnish upper secondary school teachers. *Psychology and health*, 18(4), 441-456.
- [14] Verhoeven, C., Kraaij, V., Joekes, K., & Maes, S. (2003). Job conditions and wellness/health outcomes in Dutch secondary school teachers. *Psychology and health*, 18(4), 473-487.