

## Formation of Psychological Readiness for Professional Activity: Competence Approach

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### ABSTRACT

The relevance of the investigated problem is caused by continuous processes of transformation in system of professional education, which are accompanied by an increase in requirements for young specialists - graduates. The purpose of the article is to reveal the structure of the psychological readiness for professional activity and justify the method of its formation among university students. The leading method in the study of this problem is an experiment, which allows confirming and justifying the proposed instrument of formation of psychological readiness for professional activity among students. The article presents the structure of the psychological readiness for professional activity, which includes the following components: elements of "Self - Concept", satisfaction with studies in high school, the success of professional training, commitment, self-reliance, self-control, and gives the results of testing of the method of formation of psychological readiness for professional activity of students through the actualization described components. The practical significance of the article is determined by the integration of theoretical knowledge with the ability to implement it in practice according to the proposed method, which is within the competence approach, built on activation of students self-processes as subjects of professional activity.

### KEYWORDS

Psychological readiness; professional activity; subject; method; competencies

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### Introduction

The process of converting the vocational education system is accompanied by an increase in requirements for young specialists - graduates. Much attention is paid to the readiness of the future specialists for successful solution of professional tasks. The mismatch between the professional expectations of the graduate of the university as a specialist, who is able to solve production problems and the level of his professional readiness to do it, is one of the

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frequent contradictions in the training of students in high school. One solution to the problem of formation of psychological readiness is the realization of innovative educational technologies, aimed at creating the conditions in which the student becomes the subject of educational activity and is able to more fully realize his potential.

Previously, the authors developed a theoretical model of psychological readiness for professional activities, a detailed description of which is presented in the paper "Theoretical and experimental study of a model of psychological readiness of students to professional activity" (Popov & Puchkova, 2015). The core of the model is based on general principals of Lomov's conception (Lomov, 1984) about cognitive, communicative and regulatory subsystems in the structure of human's psychological system. The model structure consists of the following units: a professional "Self - Concept"; motivation; personal characteristics and qualities; activity - significant properties and qualities. Moreover, such units as professional "Self - Concept", motivation and personal characteristics and qualities are universal characteristics to any specialty. And the elements of such unit as activity - significant properties and qualities are determined by the content of future professional activity and the representatives of the different training directions can have different levels of development of these elements.

Relying on modern educational paradigms and understanding of man as a subject of development and self-development, we can say that the formation of psychological readiness of students requires the activation of their self-processes. (Popov et al., 2008). Educational environment of high school is the area where students have the full opportunity to express their activity and initiative. Such an understanding of studying processes of students as subjects of educational activity is directly connected with such concept as "competence".

In Russian psychology the competence is studied in the aspect of professional development and human development. Accordingly, there are two basic levels of competency assessment. First - it is educational, which includes the period of vocational training, i.e. an assessment of training a competent specialist. The second - labor, i.e. assessment of the effectiveness of the professional specialist.

Some of researchers (Baydenko, 2004; Bosova, 2005; Vvedensky, 2003; Volodina, 2008; Zeer, 2005; Zimnaya, 2003; Markova, 1996; Mitina, 2002; Tatur, 2004) understand under the competence the set of qualities that reflect the flexibility and readiness to adapt to the professional environment. In fact, this idea of competence covers both of dedicated levels - education and labor. Consequently, professional competence is closely connected with the question of professionally important qualities. In this research we are standing on the Shadrikov's theoretical position, that professionally important qualities are the individual qualities of a man, which determine the success and effectiveness of his professional activity (Shadrikov, 1996).

On the basis of the constructed model was developed and tested a method of formation of psychological readiness for professional work.

## **Materials and Methods**

At the first step of the study the initial stage of university training has been selected (1-2 courses of study), because in this period the students adapt to the

new environment and to new methods of teaching. This stage includes: forming of career orientation, transforming of motivation and system of values. Also this stage is connected with intensive formation of special abilities as a result of professionalization process. Educational and professional activities for the first time become the leading type of activity. And also this stage determines formation of professional consciousness, activation of processes of self-determination and self-knowledge, design itself in the profession.

In the second step of study the psycho-diagnostic battery for measure of student's psychological readiness for professional activity was formed in the conditions of a multidisciplinary education, including the creating and testing of copyright questionnaires.

The first questionnaire was created on the basis of selected components of psychological readiness and its features. The proposed questionnaire allows to estimate current level of student's psychological readiness to professional activity and to determine the level of development some individual components (emotional, motivational and self-regulation). During the pilot study (158 respondents) this questionnaire has been passed all the necessary stages of testing and approbation.

The second questionnaire, that has been also created, allows identifying the peculiarities of motivation of choice of profession, the professional intentions, the training satisfaction in high school. Testing and standardization of the questionnaire was carried out on a sample of 820 respondents. In addition to the questionnaires, also were selected: "Motivation of educational activity" (T.T. Ilyin), "The motivation of success and fear of failure" (A.A. Rean); "Brief Career-Oriented test" (V.N. Buzin, E.F. Vanderlik); 16-PF Cattell.

The third stage included a diagnostic research among big amount of university students. The total sample consisted of 700 respondents. The study involved chemistry students, linguists and radio physics. Thus, the study was attended by representatives of natural - scientific, humanitarian and technical areas of training.

During analysis of empirical data the following statistical methods were used: analysis of the short statistics, Student's t-test, correlation analysis, factor analysis, regression analysis.

## **Results**

The results of experimental study of formation of psychological readiness for professional activity are presented in two next paragraphs.

### ***Experimental study of the structure of psychological readiness for professional activity***

At the first stage the analysis of the total sample of students (1 and 2 courses of study) was done. Based on the characteristics of this phase of training, the analysis of the empirical data was aimed at identifying the components of the success of training as an important component of readiness for professional activity. During the correlation analysis such correlates of success of training were distinguished: the general intellectual ability; self-esteem; tendency to dominate; discipline, responsibility; penchant for experimentation and innovation; motivation for a profession; motivation to

achieve success; training satisfaction. Thus, increasing the success of training at an early stage of high school preparation is possible through the development of abilities, self-confidence, interest in a future profession, training satisfaction. Factor analysis made it possible to identify the following factors: 1. The factor of "Success study", the components of which are psychological characteristics such as: self-esteem; motivation of skills development; motivation of success; the average academic score; training satisfaction. 2. Factor "Active". Factor 3. "Self-organization". 4. Factor "Motivation of learning". 5. Factor "General intellectual ability". 6. Factor "Emotional stability".

Selecting subgroups with low, medium and high scores on academic achievement and analysis of the results of each group showed that students with high academic grade have higher motivation to master a profession and gain knowledge; students with an average and low academic score are dominated by motivation of getting degree and motivation of learning. The results showed the need to work with students to raise their motivation for the profession mastering that will enhance the effectiveness of training.

Correlation analysis of sample of first course of study revealed the relationship between: success study and autonomy ( $p \leq 0,01$ ), training satisfaction with self-esteem ( $p \leq 0,01$ ) and motivation to succeed ( $p \leq 0,01$ ). Comparative analysis of samples with Student's t-test showed that successful students are more disciplined ( $t = 5,87$ ,  $p \leq 0,001$ ) and independent ( $t = 4,39$ ,  $p \leq 0,01$ ).

On the data of correlation analysis of sample of second course of study, we can conclude that there are statistically significant relationships of success study with self-esteem ( $p \leq 0,01$ ), radicalism ( $p \leq 0,05$ ) and independence ( $p \leq 0,01$ ), as well as the training satisfaction with professional intentions ( $p \leq 0,01$ ) and motivation of learning ( $p \leq 0,01$ ).

The regression analysis conducted to improve the predictability of results of research, has allowed establishing a functional relationship between the indicators of training satisfaction, training success and their correlates. In all variants of the analysis of multiple correlation coefficient between the dependent and independent variables is statistically significant and the regression model was meaningfully interpreted.

The correlation study of the total sample (in all directions) test showed that the success of the training is determined by general intellectual abilities ( $r = 0,31$ ,  $p \leq 0,001$ ), motivation to gain knowledge and to the professional development ( $r = 0,23$ ,  $p \leq 0,01$ ), the desire to achieve a result ( $r = 0,43$ ,  $p \leq 0,001$ ), autonomy ( $r = 0,18$ ,  $p \leq 0,01$ ), training satisfaction in high school ( $r = 0,75$ ,  $p \leq 0,001$ ). In the same structure as an objective indicator includes GPA - Grade Point Average ( $r = 0,16$ ,  $p \leq 0,01$ ).

According to the results of the factor analysis the following structure of readiness for professional activity is distinguished: components of "Self - Concept", training satisfaction in high school, training success, commitment, independence and self-control. Differences in the structure of readiness for professional activity of representatives of different areas are as follows. The general structure of psychological readiness of the humanities is characterized by the absence of formed ideas about the content and importance of vocational training; the structure of psychological readiness for professional activity of the representatives of natural - scientific direction is characterized by the absence of

formed ideas about the conditions of future professional activity; the general structure of psychological readiness of representatives of technical direction also includes the absence of formed ideas about the content and importance of vocational training and the absence of formed ideas about the conditions of future professional activity. Additionally it includes such peculiarity as practicality.

### ***Approbation of method of formation of psychological readiness for professional activity***

One of the areas of development, where students can fully display their activity, are the practical disciplines, the main purpose of which is to consolidate, in practice, the knowledge and the formation of certain skills, which play an extreme role in the training of future specialists (master's, bachelor's degree).

The proposed method of formation of psychological readiness for professional activity is based on such practical disciplines as: "Methodology of psychological research", "Psychological workshop", "Experimental psychology". Within this disciplines, we have created and developed a series of training activities, the main purpose of which is to form the skills of research work of the psychologist.

The structure of training includes three basic forms:

The first form is a small theoretical excursus. It is assumed that students already have the necessary knowledge, which was gained on the past lectures of various disciplines. The knowledge, which is needed to be worked in practice. Therefore, it is given a concise and succinct theoretical material to remind the basic concepts and algorithms, which are necessary for further practice.

The second form is a group work. This form occupies the largest part of the course. Students are divided into subgroups, receive special handouts and begin to work on various tasks. For example, to identify possible topics for an existing problem or formulate a problem on the topic. Or to formulate a hypothesis on the basis of the object data, object and purpose. After a group of tasks, carried out a joint discussion of the results and determine the degree of understanding of the material.

A third form is independent work - the control, which involves an assessment of formed student skills.

This course can be divided into four units.

The first unit involves the training of practical conceptual apparatus. Students learn to formulate the problem of the potential psychological research, its object, subject, purpose, hypothesis, tasks.

The second unit includes the training of skills in psychological research. Students get acquainted with real experiments, analyze them, and then develop their own experimental plans based on psychological categories offered to them.

The third unit includes training of methods of work with the empirical data. Here the general efforts are focused on quantitative methods of mathematical statistics. The main task - to form skills of right using of quantitative methods (t-Student criterion, correlation, parametric and non-parametric methods).

The fourth unit includes training of methods of interpretation, based on data analysis. Here, students are trained to interpret the results correctly.

## Discussions

Increasing the quality of vocational training is connected with the professional development of the individual. The study of professional formation of the person is presented in many literature sources (Klimov, 1998; Povarenkov, 2002; Zeer, 2005; Bodrov, 2001; Markova, 1996; Super, 1953; Holland, 1963; Dawis, et al, 1968; Collin & Young, 1986). The process of professionalization in a university determines the clarification of professional intentions, formation of professional orientation and professional-significant qualities. The psychological components, formed during the training in high school, are prerequisites for successful adaptation of graduates to the profession. Psychological readiness for activity can be considered as a factor of professional development (Dyachenko & Kandybovich, 1976; Druzhinin, 2001; Derkach, 2004; Pryazhnikov, 1996).

The study of psychological readiness for professional activity has been based on personality - activity approach, from a position of which, the readiness is considered in integration of individual, personal and subjective properties and qualities. An analysis of the literature allowed to reveal the different variants of interpretation of readiness for activity: "targeted expression of personality" in its totality of relationships, motives, attitudes, strong-willed, and other individual qualities (Dyachenko & Kandybovich, 1976); mental state (Druzhinin, 2001); holistic manifestation of personality traits, including cognitive, emotional and motivational components (Derkach, 2004).

Levitov, defining the readiness for activity as a mental state, emphasized that in addition to the "general and long-term readiness for activity there as a temporary state of readiness, which can be termed as prelaunch condition (Levitov, 1964).

In general, the psychological readiness to professional activity may be presented as a holistic phenomenon that includes an interest to activities, the need to achieve a result (motivational personality characteristics); understanding of the functional duties, professional work tasks, assess its relevance to achieving the goal of activity (cognitive personality characteristics); sense of professional and social responsibility, confidence in success, self-control, focus on the task (emotionally - volitional characteristics) (Dushkov et al., 2005).

Thus, the formation of psychological readiness for activity in the process of training related to the formation of a professional orientation relationships, motivation, personality traits, as well as the evaluation of vocational training conditions.

Understanding the majority of the authors of competence through certain qualities (competencies) system reflects the evolution of representations of the phenomenon under which before this we mean the following Triumvirate - the knowledge, skills and abilities. In this regard, L.L. Bosova (2005) notes that in the context of the concept of competence-based approach (Krajewski & Hutorskoy, 2007; Lebedev, 2004), there is a separation of competences from knowledge, skills and abilities. Knowledge act not only information, but also its implementation in practice. Skills include the ability and readiness to carry

them on the various objects of professional activity. Abilities reflect the readiness to implement it both in standard and non-standard conditions.

It should also be noted that a similar approach is also intended to include personality traits that both connected with formation of professional competence and with basis of successful career.

So the theoretical and practical significance of this study is determined by integration of separated interpretations of psychological readiness for professional activity – it was realized through creating and empirical confirming of model of psychological readiness for professional activity of students of various professional directions. The practical significance of this study is determined by suggested method of formation of psychological readiness for professional activity within this model and competence approach.

### Conclusion

Model of psychological readiness of students to professional activity consists of the following units: 1. The unit of professional "Self-Concept" that includes such characteristics as relevant to the chosen specialty, the image of a future profession and working conditions, self-assessment of abilities and activity - important qualities. 2. The unit of motivation: motivation for training, motivation for success, motivation to work in the specialty. 3. The unit of properties and qualities of personality: self-esteem, intelligence (general intellectual abilities), emotional and volitional (emotional stability, independence, discipline, commitment, the ability to self-management), communication (communicative), moral - ethical. 4. The unit of activity - significant properties and qualities: intellectual (analytic thinking, creative thinking, flexible thinking), emotional - volitional (tendency to empathy, neuro-psychological stability, initiative, decisiveness), communication (the tendency to dominate, independence from group, social courage).

The content of such units as professional "Self - Concept", motivation and personality traits is necessary for the formation and development of psychological readiness of students to professional activity and includes universal characteristics to any specialty. The elements of such unit as activity - significant properties and qualities are determined by the content of student's future professional activity and the representatives of the different training directions can have different levels of development of these elements.

Psychological conditions of formation and development of psychological readiness for professional activity in a multidisciplinary university include presence of a professional "Self - Concept" (professional identity), as well as the psychological mechanisms of development of psychological readiness for professional activity include the motivation and goal-setting.

The criteria for the formation and development of psychological readiness for professional work are the intellectual ability, independence, the ability to self-management. training satisfaction can be considered as subjective criteria, and the objective - the training success.

Approbation of the proposed method of formation of psychological readiness for professional activity among university students has proved its effectiveness. This makes it possible to use method in educational trainings with students -

psychologists and to use general ideas of this method in educational trainings with students of various specialties.

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### Disclosure statement

No potential conflict of interest was reported by the authors.

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