Motivation of students with different professional education levels as a determinant of future professional self-realization

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Abstract. Justification of the study objectives: Due to the modern demands of the labour market, the reform of the Russian education system requires serious changes, both in the specialists training system and in process of their direct activities. In particular, professional training of students with different levels of preparation and specialization requires it. Goal of research: to identify features of professional motivation that determine process of professional future self-realization of students with different levels of education. Research method: ascertaining psychological pedagogical experiment. Research result: the motivational core structure of educational professional motivation of students with different levels of education, which features a certain hierarchy of education motives mediating the process of future professional self-realization. Main conclusions and their significance: the study revealed features in the structure of the motivational core of educational and professional motivation of students of different levels of education. This is due to age characteristics, social situation and professional experience. The data of the conducted research can be useful in the implementation of effective psychological and pedagogical support of students of various educational institutions receiving professions of humanitarian orientation, as well as young professionals. In order to harmonize motives in the hierarchy of motivation and increase the level of their professional self-realization.

1 Introduction

Professional self-realization of the individual is relatively new and recent problem of research in psychology. The modern world is characterized by intensity and intensification of labor, as well as an incredibly high rate of technological progress. All of this requires a man to get new intellectual capabilities, specific professional qualities and skills. Therefore, intensity and intensification of labor set new challenges and non-standard tasks for professionals. Above all, is the task of increasing the level of efficiency under current conditions, regardless of the domain.

The education system, as a basic institution for the development of society, and therefore progress, is the first to undergo serious and radical changes, including the revision of the education quality issues and requirements for the organization and implementation of the

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pedagogical process. This, in turn, puts specialists in need of continuous professional development, search for new ways and opportunities for professional self-realization. In this process, one of the important roles is played by professional (educational professional) motivation. After all, it determines not only the approach of a specialist to the process of mastering the content of activity, the direction of work, but also its result (results).

The following researchers contributed to the development of this problem in national psychology: M. V. Lyakh [1]; V. V. Matyukhina [2]; T. O. Gordeeva [3]; E. L. Afanasenkova [4]; M. V. Lyashenko [5]; E. L Afanasenkova, N. N. Vasyagina [6].

Within the meaning of professional self-realization phenomenon, we relied primarily on the research of domestic psychologists I. V. Kostakova, S. S. Belousova (Grigorieva) [7]; N. N. Vasyagina, E. L. Afanasenkova etc., [8]. This is due to the fact that in Western psychology this concept is not considered a scientific phenomenon, and other phenomena are studied: the self as an experience of its uniqueness and unity with humanity (C. G. Jung, 1970), the desire for self-improvement (A. Adler, 1931), self-actualization (A. Maslow, 1971), meaning as a system of values, i.e. semantic universals (V. Frankl, 1985), etc. But none of these concepts is synonymous with the definition of «self-realization». In addition, it should be noted that in modern foreign works, you can find references to Russian researches when characterizing this concept.

Let us define self-realization as actualization process of new human capabilities aimed to achieve a certain result, which is provided by both the internal potentials of the individual and the possibilities in external environment under the conditions of contradictions and obstacles, when the available individual resources come short to resolve and overcome these conditions. However, «self-actualization is conditioned by metamotivation, which allows the individual to overcome internal and external obstacles to meet the need for self-actualization» and achieve the desired results [9].

As point out by I. V. Kostakova and S. S. Belousova, referring to the work of L. A. Korostyleva, professional sphere is one of the important spheres of individual self-realization [10]. That’s why, it is important to understand the essence of not just self-realization, but professional self-realization. So E. L. Afanasenkova and Y. A. Vedyashkina based on the works of S. P. Svidersky, note, that professional self-realization is «the process of identifying, understanding and implementing one’s own positive potential professional opportunities, including: internal motivation; purposefulness of the self-development processes, self-improvement, self-education and self-cultivation» [11]. This definition allows us to understand that this process is actualized by internal motivation, which acts as a driving force of professional self-realization, and its structural unit. Some modern Western researches also support this idea, for example, the work of E. L. Deci and R. M. Ryan [12]. Upon that, «self-realization is achieved when a person has a strong incentive for personal growth» [13].

Recent research of E. L. Afanasenkova and N. N. Vasyagina, on the analysis of the concepts of «self-development» and «self-realization», directly indicates that both phenomena belong to the motivational and personal sphere, since they are connected with the most fundamental human need – the desire to fully realize one’s own potential, specifically in professional activities [14]. In this regard, we believe that the motivation-oriented (motivational and target) component in the structure of professional self-realization, reflects individual's desire for achievements and reflects its motivational readiness for self-education, and efficient realization of its potential through activities. Thus, professional motivation acts as an internal driving determinant that influences the process of individual self-realization in profession.

In this regard, let us clarify the concepts of motivational and personal sphere. As part of our research interest, we consider motivation «a dynamic process of making continuous choices and decisions based on weighing of behavioral alternatives; it justifies action
purposefulness, organization and stability of integral activity; acts as an incentive to action», mediated by a system of motives that are in a certain hierarchical relationship with each other (motives: leading, accompanying, insignificant) [15]. Motivational and personal sphere, is defined by us as «a complex combination of driving forces of individual behavior that are revealed to the subject in the form of a set of needs, motives, interests, drives, goals, and ideals that directly determine human activity. This is the backbone of individual, to which such properties as orientation, value orientations, attitudes, social expectations, claims, emotions, volitional qualities and other socio-psychological characteristics «are drawn» [16]. Thus, the concept of motivation is narrower than the concept of motivational and personal sphere. However, motivation is its main structural component (motivational core).

Motivation is divided into external and internal according to activity motivation source. External motivation is conditioned by circumstances or incentives outside individual, for example, environmental factors (incentive system; activity organization level; team management style etc.). They can both contribute and hinder the process of professional self-realization. Internal motivation is directly related to individual itself and its activity orientation. It fulfills individual’s cognitive need, has a value meaning for individual, and plays an important role in professional formation, in self-development and self-realization [17].

The synergistic, pragmatist and competency-based approaches are fundamental to our research. From the perspective of synergistic approach (V. A. Shvetsova [18], A. I. Mukhina [19], etc.) the individual is considered an open autonomous system capable of self-organization, self-control, self-development and self-realization. Self-organization in this case is expressed in complication of the individual structure, with new substructural elements appearing and / or specialization and complication of the previous ones. Thus, they begin to serve new functions, so that the effectiveness of a professional, such as a kindergartner, a teacher, a teacher-psychologist, etc. increases significantly. This leads to the formation of new professional abilities and skills of the specialist, which help him cope with the current requirements of the changing environment. For such a person obstacles often act as additional incentives (internal motives) to self-development and self-realization.

The pragmatist approach allows us to consider activity as the basic condition for the development and individual realization (O. S. Anisimov [20], Yu. V. Gromyko [21], etc.). By reference to it, the phenomenon of individual development itself is considered the result of its inclusion in the system of social relations and historically determined social activity. It is the activity that makes it possible for a person, as its subject, to acquire a personally determined social experience, to form a system of internal motives, to understand their own potential and to realize it, for example, in a profession.

Competency-based approach (O. A. Ulyanina [22], G. A. Bordovsky [23], G. N. Serikov [24], etc.) focuses on the results of future specialist development and the results of employee's activity in terms of mastering the necessary competencies. The very process of mastering general cultural, professional, and special competencies requires a high motivational orientation and significant efforts from the individual, intensive intellectual development, high level of reflection, adequate self-esteem, critical thinking, formed point of view, etc. All this determines the ability of the subject not only to work efficiently and productively, but also to learn throughout life, i.e. to strive for continuous self-development and self-realization in profession.

2 Materials and methods

Based on these approaches, in order to achieve the indicated research goal we used the following group of methods. Theoretical methods: comparative method and method of scientific ideas categorization. Empirical methods: psychological and pedagogical
ascertaining experiment, psychodiagnostic method (method of assessing the level of claims of V. K. Gerbachevsky).

3 Results

To determine the features of professional motivation of students with different levels of education, and to establish relationships between educational and professional motivation and possible levels of their future professional self-realization, we conducted the psychological and pedagogical ascertaining experiment. The experiment was held in the Institute of psychology and pedagogy and the Department of socio-economic training of the Polytechnic College of Sakhalin state university (SakhGU). The survey of respondents was conducted between February 24 and March 24, 2020.

71 students took part in the research. Of these, 36 are fourth year students of extramural form of training, majoring in "Psychological and pedagogical education", and 35 are third year students of intramural form of training, majoring in "Law and social security system". The age of students receiving higher education ranged from 23 to 55 years. Among this group, 6 students have general secondary education, 10 have higher education, and 20 have vocational secondary education. The age of students studying in Polytechnic College ranged from 18 to 21 years. Of these, 14 students have compulsory education (9 years in school), 21 students have general secondary education (11 years in school).

Claims level assessment method by V. K. Gerbachevsky was chosen as the tool of our research. It includes 42 statements which must be evaluated on a scale from -3 to +3. Based on the results of the testing, the motivational structure of the individual in activity and the claims level will be determined. There are 15 scales in this structure. According to the method, all scales (as components of motivational structure) are divided into four groups. The first group: components that represent the core of motivational sphere. The second group: components associated with achieving of challenging objectives. The third group: components that make up the forecast estimates of subject in activity. The fourth group: components that reflect the causal factors of corresponding activity. For our research, the first group of factors, i.e. the motives that make up the core of the motivational sphere of individual, is of the greatest scientific interest. This group includes the following motives: 1) inner motive – the level of passion for individual’s activity; 2) cognitive motive – level of interest in subject’s performance; 3) avoidance motive – the subject’s fear to show low activity results; 4) competitive motive – subject’s interest in high results in comparison with other actors; 5) motive to change current activity – the subject's feelings on termination of the activity; 6) self-respect motive – subject’s desire to feel pride in achieved results.

The final calculations of self-esteem motive, using this method, allow us to determine the level of personal claims in future activities: low level (3 – 9 points), average level (10 – 16 points), high level (17 – 21 points).

To determine professional motivation development degree of students with different educational levels, namely: higher education (henceforth HE) and vocational education (henceforth VE), using the whole sample, arithmetic average for professional and educational activity (PEA), included in motivational core, was calculated. The processed results are shown in figure 1.
Fig. 1. PEA motives development rates of students with different levels of education.

Comparative analysis of the findings shows that the group of subjects receiving higher education has the highest cognitive motive rate. The rest of the PEA motives and, consequently, motivation in general, is of average rate. Furthermore, the group of university students has more pronounced results for all the studied motivational core structure motives.

Let us compare self-esteem motive and cognitive motive rates and determine whether there is a direct relationship between them, using the student's test. The obtained empirical value of $t_{emp}$ (7.6) is in the zone of statistical significance, therefore, we can say that the development rate degree of self-esteem motive depends on cognitive motive rate. In other words, the more pronounced the need to learn the content of future activity, the more efforts a student makes in order to do it, the more significant the results he gets during professional training, the more self-respect he has for himself.

After analysis of motive development rates of VE students (as a homogeneous group), we can state following. They have two most developed motives: cognitive motive (15,4) and the self-respect motive (15,2) – just like higher education students. However, the difference in the rates of development of these motives is minimal.

In order to test our assumption that there are no differences between the development rates for a group of motives mentioned earlier, we applied the method of mathematical statistics, the student's test. The obtained empirical value of $t_{emp}$ (0.4) is in the zone of statistical insignificance. This indicates that our assumption is correct. This is due to the fact that college students are only at the first stage of professional education and, unlike university students of extramural form of training, have no experience of real professional activity.

However, given that the groups of respondents can only nominally be considered homogeneous, we decided to find out whether there is a difference in their motivation structure depending on their basic education at the time of admission to different professional education institutes. For this purpose, we compared the PEA motives development rates within the test groups (figure 2).
Results analysis shows that students who spent 9 years in school have more pronounced results in all motives, except the self-esteem motive. This can be explained by the fact of their educational training program being longer for one academic year than the program for student of 11 years of school. This creates conditions for better development of professional motivation and professional intentions, which students who spent 11 years in school lack.

The self-esteem motive is higher for students who spent 11 years in school. This indicates that this group of respondents have pronounced self-respect due to already achieved result (they are to become certified specialists soon) as a compensation for when they failed to enter a higher education establishment (which is why they entered college).

Let us have a look at PEA motives development rates of students receiving higher education (figure 3).

![PEA motives development rates of HE students with different levels of basic education](image)

**Fig. 3.** PEA motives development rates of HE students with different levels of basic education.

Comparing the research results of PEA motives development rates of subject’s motivational core, particularly subjects receiving higher education, the following was found. Of all higher education students, regardless of their basic (admission level) education cognitive motive has the highest rate among the PEA motives. The second most pronounced motive in this group of respondents is self-esteem motive, but students receiving the second higher education have the highest rate for this motive (17.2). A special feature of VE students motivational core structure of this group of respondents is that they have internal motive accompanying cognitive motive.

To establish the relationship between the development level of overall professional motivation among students with different educational levels and their ability to self-realize in their future profession, we calculated the claims level based on the self-esteem motive data. Percentagewise, the claims level was distributed as follows. In the group of students receiving higher education, 42% of respondents (15 students) have a high level, average – 53% (19 students), and low – 5% (2 students). Students receiving vocational education have a high level of claims – 43% of optants (15 students), average – 37% (13 students), low – 20% (7 students).

Claims level percentage analysis allows us to suggest that VE students with high level of claims, will have productive level of professional self-realization, and that HE students will have productive-creative level of professional self-realization [16], which is determined by them already having professional experience.

4 Discussion
The results of the research taken allowed us to establish that cognitive and self-respect motives are the leading motivations in motivational core structure of VE students: This is due to the fact that the leading activities of this age are educational and professional. Therefore during this period students get to know and accept the profession through learning of professional module subjects and practice (by internship). In addition, VE graduates are meeting present need for professional and personal self-identification by obtaining a diploma as a real result of their efforts and achievements on one hand, and as the right to get independent professional activity and independent adult life on the other.

Following motives fell in the group of accompanying motives in the same category of respondents: competitive motive, motive to change current activity, and avoidance motive. We relate this fact with the process of personal self-identification and separation that are relevant for students of VE due to their age. As a result, equal competition with others is the most accessible way for them to prove their own viability and success. Motive to change current activity is included in accompanying motives group because VE graduates strive to complete the process of professional training as quickly as possible and to find independence (the desire for an autonomous adult life). Avoidance motive is relevant for this group of respondents for the following reasons. Most of ninth-graders chose VE because they were lacking confidence in passing the unified state exam (underestimation of their abilities), and eleventh-graders chose VE, after receiving a negative experience due to the discrepancy between subjective claims and the real result when entering universities (overestimation of their capabilities). This negative experience left its consequences in personal perception of situations which requires confirmation of their own viability. This experience "taught" them to set goals achievements of which won’t lead to failure and disappointment a priori.

Next group of optants already has an experience of labor relations and / or professional activities. Therefore, the structure of professional motivation for students receiving higher education is as follows: cognitive motive and self – respect motive are the leading motives. This is due to the conscious need and respondents desire to constantly develop the system of their own professional knowledge and improve professional competence level in a situation of professional competition. This accumulates their self-respect for the real costs and achievements associated with obtaining higher education in a situation where they have already proven themselves as specialists in a particular field. The accompanying motives are: internal motive and competitive motive. This is due to the fact that in order for this group of respondents to achieve their goals, first of all, it must be personally active, use maximum of internal resources to be in demand as professionals among other specialists who already have higher education (be competitive). That is, now they understand the need for education as confirmation for their level of professionalism, as well as for further career growth.

5 Conclusions

The results of the research taken show that professional motivation of specialists with different levels of education has the following features.

First, degree of all professional motivation components is higher with students receiving higher education.

Secondly, the group of leading motivational sphere core motives is represented by identical motives: cognitive motive and motive of self-respect for both VE and HE students. Therefore, these very motives will determine the level of their future professional self-realization.

Third, if we are to analyze the claims level of respondents from both groups, we can assume that 43% of VE students and 42% of HE students, respectively, will have a productive and creative-productive level of possible professional self-realization. We believe that this is due to the group of leading motives, as well as optant’s claims levels, providing their self-
realization in profession.
However, clarification and expansion of factors that influence the process of professional self-realization, which may become the subject of further research, are required.

6 Further research

In the course of research, we faced a need to establish a dependence between the leading motives of professional activity and subject’s self-realization levels in profession. And to identify additional determinants and factors that cause different professional self-realization levels. This will allow us to create an effective model of psychological and pedagogical individual support, both at the stage of obtaining professional education and at the stage of professional activity realization for the most efficient professional self-realization, as well as professional burnout prevention.

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