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Students Motivation in Higher Vocational Education System: Petrozavodsk State University

Motivación de los estudiantes en el sistema de educación vocacional superior: Universidad Estatal de Petrozavodsk

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ABSTRACT

This research is devoted to studying the motivation of students to continue their education in the higher education system - in the magistracy, graduate school and the system of additional postgraduate professional education. During the study, first-year and fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University were interviewed. The relevance of this research paper is to identify the main motives among junior and senior students for continuing their education, taking into account the socio-economic situation in the Russian Federation and in the world at the moment.

Keywords: Bachelor, Graduate school, Motivation, Social stability, Undergraduate studies.

RESUMEN

Esta investigación está dedicada a estudiar la motivación de los estudiantes para continuar su educación en el sistema de educación superior, en la magistratura, la escuela de posgrado y el sistema de educación profesional adicional de posgrado. Durante el estudio, los estudiantes de primer y cuarto año del Instituto de Cultura Física, Deportes y Turismo de la Universidad Estatal de Petrozavodsk fueron entrevistados. La relevancia de este trabajo de investigación es identificar los principales motivos entre los estudiantes júnior y sénior para continuar su educación, teniendo en cuenta la situación socioeconómica en la Federación de Rusia y en el mundo en este momento.

Palabras clave: Escuela de posgrado, estabilidad social, estudios de grado, licenciatura, motivación.

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INTRODUCTION

Currently, a significant part of the young population of the Russian Federation chooses to study at higher educational institutions. The enrollment rate in higher education programs for the population of 17–25 years from 2001 to 2017 increased from 25.8% to 31.4%. (Platonova et al.: 2019), which indicates the relentless attractiveness of higher education (HE).

The existing HE system has a step structure; at each stage, the student has the right to complete his studies.

The first stage of higher education is the bachelor's program - a system of training highly qualified personnel with the qualification of a bachelor who is capable of full-time work.

Education at the second stage of higher education, in magistracy, serves to deepen specialization in an existing field or to receive education in an adjacent or other specialty in a relatively short time (Chumakova: 2014, pp.231-238), a graduate is awarded a master's qualification. Master is a link in the preparation for research activities and is able to stimulate self-actualization in professional activities (Batysheva&Novikov: 2009), that is, a person's internal desire to fully identify personal opportunities, including the construction of a personal educational path (Evans & Porter: 2020, pp.145-187).

Postgraduate study is a system of training scientific personnel and, in the case of a successful defense of a candidate dissertation, a student receives a scientific degree of a candidate of science, has the opportunity to work in the scientific field, to conduct research activities.

The system of additional postgraduate professional education is additional educational programs that allow expanding the list of competencies of a bachelor in a chosen direction. Graduates with bachelor and master qualifications are accepted for training (Motyer: 2020, pp.58-98).

Universities are interested in attracting bachelors to further studies in the magistracy and the system of additional professional education, as this is the foundation of the existence and development of the educational institution itself. Attracting masters to study in graduate school is a system of educating scientific personnel, including for conducting educational and research activities within the walls of universities.

Initially, people with a certain motivation for a sufficiently long and intensive study come to the higher education system (Galan et al.: 2017).

What are the motives for continuing studies after graduation, when the acquired qualifications already make it possible to engage in professional activities?

Do employer-backed convictions of undergraduate qualifications and anxiety about job opportunities serve as motives? Or maybe the magnitude of the expected salary or personal motivation for obtaining deeper knowledge in the area of interest has a significant impact? Does the formation of motivation affect the compliance of master's programs with international educational standards (Donina et al.: 2016, pp.32-36)?

We will determine what we mean by the concepts of motive and motivation. Motive is a motive reason, foundation, reason for any action, act (Evgenieva: 1998). Motivation is a community of processes, means, methods of stimulating a person to cognitive activity (Mormuzheva: 2013, pp.160-163). Motivation as a set is based on individual motives. These motives are very specific and can be internal and external (Galashova et al.: 2014, pp.91-101). External influences include the environment (Maslow: 2014) - recommendations of parents, teachers, classmates, position in society, material reward; to internal - the expected development, improvement of personality in the learning process (Hauck: 2019, pp.227-252).

The tendency to change the psychological paradigm, the priority of personal growth, creates a certain attitude towards the realization of this growth through training in the higher education system.

Rapid changes in the economic situation on a global scale are making adjustments to the requirements of employers regarding the competencies of workers. Increasingly, specialists with several related specialties are required. A change in the educational path increases the competitiveness of graduates, allows them to meet these requirements, and provides an opportunity to consider a wide range of jobs.

This study was conducted with the aim of identifying significant reasons for bachelors to continue their education in higher education (Kok: 2016, pp.1-7).

METHODOLOGY

A total of 200 people were surveyed: 100 first-year students and 100 fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University. The study involved students in the following areas of training: Pedagogical education (with two training profiles) Profiles: Education in subject areas (Life Safety and Physical Culture); Pedagogical education Profile: Education in the subject area Physical education. By gender, the samples did not differentiate.

We have developed three questionnaires, which include the main motives for continuing education in the master's program, postgraduate study and the system of postgraduate additional professional education. The respondent was required to give points for these reasons - from one to ten - depending on how intensely this reason prompts the respondent to continue their studies further. The stronger the indicator motivates to further education, the greater the score it can be assigned to and vice versa - the less the reason motivates, the lower the score assigned to it (Freeks: 2016, pp.236-248).

The results of the study were statistically processed. The mean value of the trait was calculated (the average score of the motive in the sample), the standard deviation, the criterion for the significance of differences in t-tests. Statistical analysis was carried out using the statistical package SPSS, version 10.0 (SPSS, USA). Comparison between groups of control and experimental results was carried out using independent t-tests. A value $p < 0.05$ was considered statistically significant. Data were expressed as mean, standard deviation (Meeuwisse et al.: 2010, pp.93-111).

The respondents were required to evaluate the following indicators, which are the main reasons for further studies in the magistracy:

- 1) Personal and professional self-improvement (*indicator 1*)
- 2) Perception of undergraduate education as a system of education that necessarily requires training at the next level (*indicator 2*)
- 3) The desire to study in a magistracy abroad (*indicator 3*)
- 4) Subjective opinion on the difficulty of finding a graduate with a bachelor's degree (*indicator 4*)
- 5) Subjective opinion on the higher wages of employees with a master's degree (*indicator 5*)
- 6) Conviction of a greater career opportunity for a master's degree (*indicator 6*)
- 7) Consideration of the opinion of parents (guardians) when deciding on further studies in the magistracy (*indicator 7*)
- 8) Lack of a sustainable life position for further training or employment (*indicator 8*)
- 9) Subjective opinion about great job opportunities abroad (*indicator 9*)

Students were also offered a questionnaire, which includes indicators that are the main reasons for further studies in graduate school:

- 1) Personal interest in the profession and the acquisition of new knowledge, skills and abilities (*indicator 1*)
- 2) The desire to make a scientific discovery (*indicator 2*)
- 3) Opinion on the possibility of internship abroad and getting a decent scholarship (*indicator 3*)
- 4) Opinion on a higher material assessment of the work of the candidate of sciences (*indicator 4*)
- 5) Opinion on promising career opportunities after defending a dissertation (*indicator 5*)
- 6) Acceptance of the opinion of parents (guardians) regarding the continuation of postgraduate studies (*indicator 6*)
- 7) Lack of the desired place of employment after graduation (*indicator 7*)
- 8) Subjective opinion on the possibility of quick employment in case of emigration abroad (*indicator*

In addition, the respondents were asked a questionnaire with a request to evaluate the following indicators included in it, which are the main reasons for studying in the system of postgraduate additional education:

- 1) Interest in professional growth and the acquisition of new knowledge (*indicator 1*)
- 2) The desire through additional education to make a significant contribution to their professional activities (*indicator 2*)
- 3) Subjective opinion on the possibility of internship abroad in order to obtain additional education (*indicator 3*)
- 4) Expectation of a salary increase after receiving additional education (*indicator 4*)
- 5) Expectation of further career growth after further training (*indicator 5*)
- 6) Subjective opinion on the possibility of successful employment in the event of emigration abroad (*indicator 6*)

Consent to receive additional education only in connection with the requirements of higher authorities (*indicator 7*)

RESULTS

When evaluating the results of the survey on training in a magistracy, the points were distributed as follows (table 1).

Indicators	1 year (score on the indicator)	4 year (score on the indicator)
Indicator 1	4,32 ± 1,11	5,22 ± 3,31
Indicator 2	3,55± 2,25	5,21± 3,11
Indicator 3	4,71 ± 2,38	7,86± 3,62
Indicator 4	3,16 ± 2,76	5,68± 2,67
Indicator 5	4,24 ± 1,51	9,12± 2,32
Indicator 6	4,64 ± 1,21	9,22 ± 2,22
Indicator 7	4,13 ± 1,79	2,11± 3,14
Indicator 8	3,59 ± 2,31	5,35± 3,15
Indicator 9	4,12 ± 2,45	7,23 ± 2,19

Table 1. Average values of motivation indicators for first- and fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University for further studies in the magistracy.

The most motivating for further studies in the magistracy for first-year students of the Institute of Physical Culture, Sports and Tourism were the desire to study in a magistracy abroad (*indicator 3*), the conviction of a greater possibility of career growth for the master (*indicator 6*) and personal and professional development (*indicator 1*).

For the fourth year students, the most motivating factors were: confidence in a greater career opportunity (*indicator 6*), a subjective opinion about a higher salary of employees with a master's degree (*indicator 5*), and the difference from the responses of freshmen in the indicators is reliable, and the desire to study for a master's degree abroad (*indicator 3*) (Velde: 2009, pp.35-51).

Freshmen take middle positions in terms of motivation: subjective opinion about higher wages (*indicator 5*), parents' opinion (*indicator 7*) and subjective opinion about great job opportunities abroad (*indicator 9*). Among fourth-year students, the average level of motivation was noted among factors: a subjective opinion about the great job opportunities abroad (*indicator 9*), a subjective opinion about the difficulty of finding a

graduate with a bachelor's degree (indicator 4) and a lack of a stable life position for further training and employment (indicator 8).

First-year students considered the least attractive motives for continuing education to be the lack of a stable life position (indicator 8) and the subjective opinion about the difficulty of finding a graduate with a bachelor's degree (indicator 4). Fourth year students consider personal and professional self-improvement (indicator 1) and parents' opinion (indicator 7) to be less significant motives.

Both groups of students placed indicator 2 on one of the least significant positions - the perception of undergraduate studies as a system that requires compulsory education at the next level.

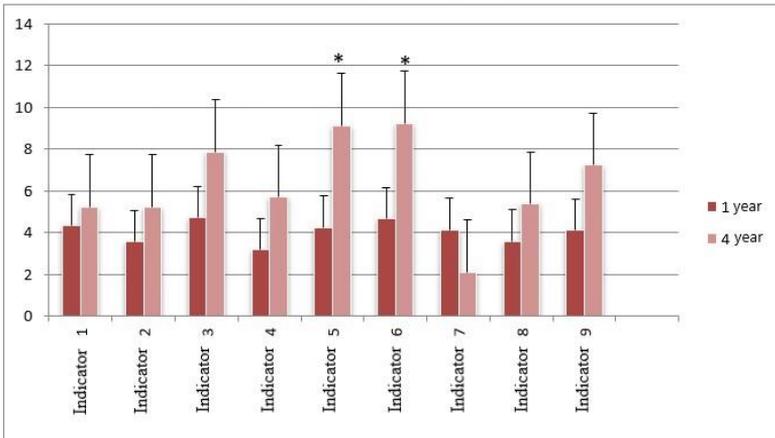


Figure 1. Comparison of the average values of the indicators of motivation of first- and fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University for further studies in the magistracy

The abscissa indicates the indicators of motivation.

The ordinates indicate the points.

* - significant ($P < 0.05$) difference

When evaluating the results of the survey on the motivation to study in graduate school for first- and fourth-year students of the Institute of Physical Culture, Sports and Tourism, the points were distributed as follows (table 2).

Indicators	1 year (score on the indicator)	4 year (score on the indicator)
Indicator 1	4,21 ± 2,48	3,25 ± 2,51
Indicator 2	3,55 ± 2,55	3,33 ± 2,22
Indicator 3	4,31 ± 1,77	4,26 ± 2,84
Indicator 4	3,11 ± 2,68	5,31 ± 2, 55
Indicator 5	2,56 ± 2,02	5,22 ± 3,05
Indicator 6	3,55 ± 2,85	2,43 ± 1,92
Indicator 7	3,53 ± 2,33	4,76 ± 2,13
Indicator 8	3,45 ± 2,73	4,65 ± 2,68

Table 2. Average values of indicators of motivation of first- and fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University to further study in graduate school.

The most motivating for further studies in graduate school for first-year students of the Institute of Physical Culture, Sports and Tourism are the possibility of internship abroad and a decent scholarship (indicator 3), personal interest in the profession and the acquisition of new knowledge, skills and abilities (indicator 1), desire make a scientific discovery (indicator 2). Fourth-year students give the greatest importance to the opinion of a higher material assessment of the work of the candidate of sciences (indicator 4), the prospects for possible career growth after defending a thesis (indicator 5) and the absence of the desired place of employment after graduation (Aldous& Brown: 2020, pp.1-14) (indicator 7).

The following factors are average in strength for first-year students: the opinion of parents (guardians) (indicator 6), the absence of the desired place of employment after graduation (indicator 7), the subjective opinion of the possibility of quick employment when emigrating abroad (indicator 8). For fourth-year students, the average motivation is a subjective opinion on the possibility of quick employment when emigrating abroad (indicator 8), an opinion on the possibility of internship abroad and a decent scholarship (indicator 3), the desire to make a scientific discovery (indicator 2).

The low level of motivation for freshmen is the opinion of a higher material assessment of the work of the candidate of sciences (indicator 4) and the opinion of the prospective career opportunities after defending a candidate's dissertation (indicator 5). Among fourth-year students, personal interest in the profession and the acquisition of new knowledge and skills (indicator 1) and the opinion of parents (indicator 6) are of the least importance.

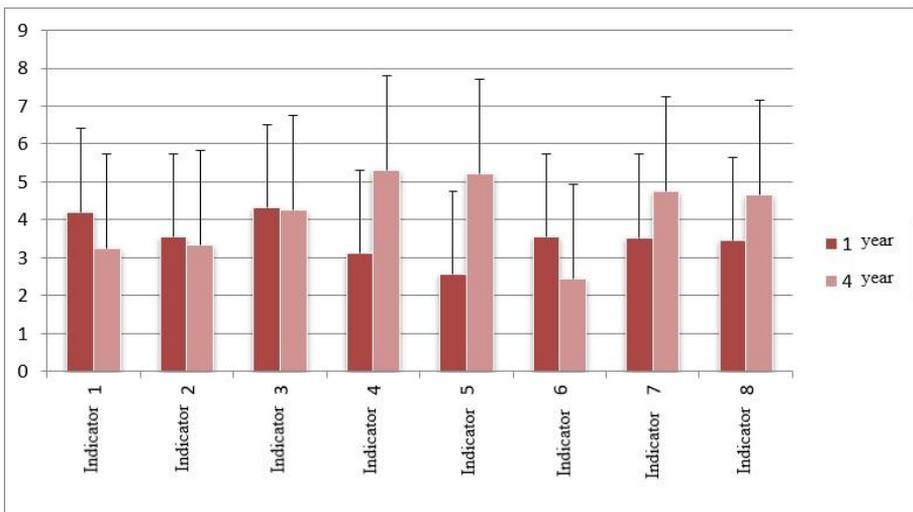


Figure 2. Comparison of the average values of the indicators of motivation of first- and fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University for further studies in graduate school.

The abscissa indicates the indicators of motivation.

The ordinates indicate the points.

When assessing the main motives for studying in the system of postgraduate additional education, the data were distributed as follows:

Indicators	1 year (score on the indicator)	4 year (score on the indicator)
Indicator 1	4,55 ± 2,41	3,15 ± 2,44
Indicator 2	4,35 ± 1,85	3,28 ± 2,01
Indicator 3	4,64 ± 2,05	4,55 ± 1,88
Indicator 4	4,34 ± 3,22	9,22 ± 1,12
Indicator 5	4,11 ± 3,55	9,18 ± 1,73
Indicator 6	4,35 ± 1,88	4,72 ± 2,41
Indicator 7	2,17 ± 2,86	2,16 ± 2,24

Table 3. Average values of indicators of motivation of first- and fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University to postgraduate additional professional education.

The main motivation for studying in the system of additional education for first-year students is the opinion about the possibility of internship abroad (indicator 3), interest in professional growth and the acquisition of new knowledge (indicator 1) and the desire to make a significant contribution to their professional activities (indicator 2) (Gill: 2020, pp.795-808).

For fourth-year students, an important motive is the expectation of higher wages after receiving additional education (indicator 4) and the expectation of further career growth after further training (indicator 5). Both of these indicators are significantly higher in fourth-year students. Another important motive is the opinion about the possibility of successful employment in the event of emigration (indicator 6).

To a lesser extent, freshmen are motivated by the opinion about the possibility of internship abroad (indicator 3) and the expectation of higher wages (indicator 4). Four-year students give less importance to motives: the possibility of internship abroad (indicator 3), the desire to make a significant contribution to their professional activities (indicator 2).

First-year students are motivated by the minimum expectation of career growth (indicator 5), and fourth-year students are interested in professional growth and the acquisition of new knowledge (indicator 1).

The least powerful motivation is the requirement of higher authorities to receive education (indicator 7) for both freshmen and fourth-year students (Stevenson: 2020).

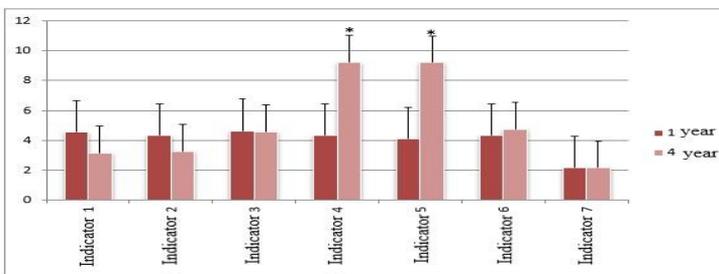


Figure 3. Comparison of average values of indicators of motivation of first- and fourth-year students of the Institute of Physical Culture, Sports and Tourism of Petrozavodsk State University to postgraduate additional professional education (Fakhrutdinova et al.: 2019, pp.151-157).

The abscissa indicates the indicators of motivation.

The ordinates indicate the points.

* - significant (P <0.05) difference

DISCUSSION

When analyzing the results of the study, the main motives for studying in a magistracy were revealed - this is the conviction of all students of the Institute of Physical Culture, Sports and Tourism of the greater possibility of career growth for masters, although these students are convinced that qualification of a bachelor does not require compulsory education at the next stage. In their opinion, a bachelor's qualification is sufficient for employment, but a master's student who has great prospects for climbing the career ladder is more competitive. Among the first-year students, the leading motive is the desire to study in a magistracy abroad, and among fourth-year students, this motive falls into third place. Fourth-year students have a second opinion among all motives about the higher salary of a master. This can be explained by a greater awareness of wage levels in the upcoming professional sphere. By the fourth year, among students, the motivation to continue their studies in the form of a higher salary and a greater possibility of employing masters is significantly growing compared to the opinion of freshmen. And the important weight of the opinion of personal self-improvement for the fourth year loses its leading position and falls to seventh place, as does the weight of the opinion of parents, who from fifth position in freshmen moves to ninth.

The main motives for postgraduate studies among first-year students are the possibility of internship abroad with a decent scholarship and personal interest in the profession with the acquisition of new knowledge, skills, as well as the possibility of scientific discoveries, while fourth-year students put an indicator of personal interest in the profession on one of the last places, not counting his main motive. Among the fourth-year students, the main motives are a high material assessment of labor and the career prospects of the candidate of science, which is not surprising, because they are on the verge of starting work, and freshmen put these motives in last place, because they have several years of stability in the learning process.

For training in the system of postgraduate additional professional education, the main motives among freshmen are the opportunity to study abroad and interest in professional growth; among fourth-year students - the expectation of an increase in the level of wages and career growth after receiving additional education. As bachelors study, a decrease in the significance of such a motive as an interest in professional growth and the acquisition of new knowledge is noted, possibly due to the fact that students have acquired tools for independent knowledge acquisition, and less significant motives for career growth and high wages in the first courses, approximation of labor activity, act as determining. The motivation in the form of the possibility of successful employment abroad after acquiring additional education is in third place among all students, that is, it is very important and can determine the direction of development of the university.

When approaching the term for graduation, students are in the process of choosing, the influence on the choice of parents' opinions is almost leveled. An attractive motive for choosing to continue studies is the level of wages and career growth, as well as the possibility of internships and the competitiveness of employment abroad.

Thus, in order to attract students to study in the magistracy, graduate school and the system of continuing professional education, career opportunities and the economic attractiveness of qualifications at various levels of the higher education system should be demonstrated, as well as ensuring social stability.

CONCLUSION

Based on the results of the study, the following conclusions can be drawn: the motivation of students of the Institute of Physical Culture, Sports and Tourism to continue their studies in the magistracy, postgraduate study and the system of postgraduate additional professional education changes in the learning process from the priority of the desire for internship abroad and interest in personal and professional growth first-year

students to the priority of greater career opportunities, and a greater material assessment of human labor with higher qualifications in fourth-year students.

The decision to continue training may be affected by timely informing students about starting salary levels and career opportunities for graduates with various qualifications.

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