

Specifics of the dynamics of educational activity motivation and antimotivation in students of a pedagogical university

Características de la dinámica de la motivación y la antimotivación de la actividad educativa en estudiantes de una universidad pedagógica

Natalia Valentinovna IVANOVA [1](#); , Elena Viktorovna MINAEVA [2](#); , Nikolay Ivanovich LAPIN [3](#); , Olga Veniaminovna SUVOROVA [4](#); , Yelena Borisovna MAMONOVA [5](#)

Received: 25/07/2017 • Approved: 02/08/2017

Content

- [1. Introduction](#)
 - [2. Methods](#)
 - [3. Results and discussion](#)
 - [4. Conclusion](#)
- [References](#)

ABSTRACT:

The aim of the study was to explore the specifics of the dynamics of educational activity motivation and antimotivation in students of a pedagogical university. Diagnostic inventory in the study included "Motivation for studying in a university" questionnaire by T.I. Ilyina and questionnaire of students' educational activity antimotivation by N.V. Ivanova and E.V. Minaeva. The conclusions were evaluated with such methods of mathematical statistics, as Friedman's test, Page's trend L-test and correlation analysis; the results were analyzed with IBM SPSS Statistics 23 software. As a positive characteristic in the dynamics of prospective teachers' motivation for educational activity we revealed pursuit of knowledge, while the negative one was the decreased motivation to master the profession by the end of studies. The revealed specifics were confirmed by a linear correlation of data from different pedagogical universities. We established the stability of educational-activity antimotivation manifestation and its determination throughout studying in a pedagogical

RESUMEN:

El objetivo del estudio fue explorar las especificidades de la dinámica de la actividad educativa motivación y antimotivación en estudiantes de una universidad pedagógica. El inventario de diagnóstico en el estudio incluyó "motivación para estudiar en una Universidad" cuestionario de T.I. Ilyina y cuestionario de la actividad educativa de los estudiantes antimotivación por N.V. Ivanova y E.V. Minaeva. Las conclusiones fueron evaluadas con tales métodos de Estadística matemática, como la prueba de Friedman, la tendencia de la página L-prueba y análisis de correlación; los resultados se analizaron con el software IBM SPSS Statistics 23. Como una característica positiva en la dinámica de la motivación de los futuros docentes para la actividad educativa, revelamos la búsqueda del conocimiento, mientras que la negativa fue la disminución de la motivación para dominar la profesión al final de los estudios. Las especificidades reveladas fueron confirmadas por una correlación lineal de datos de diferentes universidades pedagógicas. Establecimos la

university. The obtained results can define vectors of work for improving the motivational field in prospective teachers.

Keywords: motivation, antimotivation of educational activity, students, pedagogical university.

estabilidad de la manifestación de la antimotivación de la actividad educativa y su determinación a lo largo del estudio en una universidad pedagógica. Los resultados obtenidos pueden definir vectores de trabajo para mejorar el campo motivacional en futuros docentes.

Palabras clave: motivación, antimotivación de la actividad educativa, estudiantes, Universidad Pedagógica.

1. Introduction

The system of modern higher pedagogical education functions, on the one hand, on the background of decreasing appeal of pedagogical profession in the society, and on the other hand, in the conditions of increasing requirements toward graduates' professional competence. Optimizing professional training of prospective teachers is impossible without knowing and considering the specifics of development and dynamics of students' motivational field, where educational activity motivation takes an important place. The problem of students' educational activity motivation was addressed in various aspects in theoretical and applied psychological-pedagogical studies of researchers from different countries. They revealed the influence of educational activity motivation on students' academic performance (Oliver, 1995; Brophy, 1998; D'Ornyei, 2001; Gelmont, 2003; Lapkin & Yakovleva, 1996; Stipek, 2002; Lens, 1991) and on psychological well-being (Gordeeva et al., 2013; Dokutovich, 2007; Chayka, 2002; Starodubtseva, 2006). Various diagnostic inventories for studying students' educational activity motivation and antimotivation (amotivation, demotivation) have been developed and validated (Vallerand et al., 1992; Gordeeva et al., 2013; Ovchinnikov, 2008; Karpova, 2009; Ketko & Pakulina, 2010; Ivanova & Minaeva, 2015). It is especially important to study educational motivation in students of pedagogical universities, because they would have to provide the development of educational motivation in their students during their prospective professional activity (Karnaukhov, 1997; Lekerova et al., 2015; Ovchinnikov, 2008; Pavlova, 2005; Ivanova et al., 2015). However, it is necessary to point out that the problem of revealing the specifics of the dynamics of educational activity motivation and antimotivation in a single sample of students remains extremely unstudied. This, in turn, does not allow correct and efficient design of work for optimizing prospective teachers' motivational field in the system of higher professional pedagogical education.

2. Methods

The aim of our study was to explore the specifics of the dynamics of educational activity motivation and antimotivation in students of a pedagogical university.

The conducted study solved the following tasks:

- To trace the dynamics of educational motivation in students of psychological-pedagogical department of a pedagogical university;
- To reveal correlations between motivation scales;
- To analyze the correlation between educational motivation dynamics in students of different pedagogical universities;
- To trace the dynamics of educational activity antimotivation in students of psychological-pedagogical department of a pedagogical university

In order to fulfill the aim and tasks of our study, we used the following diagnostic inventory: "Motivation for studying in a university" questionnaire by T.I. Ilyina (Ilyin, 2002) and questionnaire of students' educational activity antimotivation for prospective teachers by N.V. Ivanova and E.V. Minaeva (2015). Both questionnaires are constructed on the basis of the preliminary diagnostic procedures (surveys, content analysis, ranking, expert evaluation); they were evaluated for reliability and validity and were validated in a number of studies in the samples of students from different countries (Russia, Kazakhstan and the Czech Republic).

The questionnaire of T.I. Ilyina includes 50 statements, 4 of which are baseline, neutral to the goals of diagnostic and are not included in the analysis of the results. The participants are proposed to express their agreement (to mark with a "+") or disagreement (to mark with a "-") with the statements. The technique contains three scales: "acquiring knowledge", "mastering the profession" and "getting a degree". The scores on each of the scales are calculated according to the key. If the total score on the scales of "acquiring knowledge" and "mastering the profession" is higher than the total score on the scale of "getting a degree", students' educational motivation is considered to be adequate.

The questionnaire of students' educational activity antimotivation by N.V. Ivanova and E.V. Minaeva includes 30 factors, which can decrease educational motivation, i.e., to act as educational activity antimotivations. All factors (antimotives) are divided in 6 groups depending on environmental determination: macroenvironment (society in general), microenvironment (family environment) and components of educational environment (spatial-objective, psychological-didactical, social and subjective). Each group is represented in the questionnaire by an integration of 5 educational activity antimotives that are presented in mixed order. The participants are asked to evaluate the educational activity antimotives for the level of their subjective significance on a five-point scale (1 point corresponds to the minimal score, 5 points – to the maximal). In accordance with the scale, the questionnaire allows evaluating the general level of educational activity antimotivation in students, as well as the representation of educational activity antimotives that have different environmental determination.

The experiment used the results of doctoral research of N.A. Pavlova (2005) that were obtained with T.I. Ilyina's method for comparing the dynamics of educational activity motivation in students of different pedagogical universities.

3. Results and discussion

Participants in the study were students of the bachelor programs at the department of psychology and pedagogics of Minin Nizhny Novgorod State Pedagogical University, 19 to 22 years old. Total sample consisted of 90 people studying full-time during the second, third and fourth academic years.

Due to the fact that the number of participants was slightly different for different academic years, we used mean scores for each academic year (year of study) for the most precise analysis of the results of the selected techniques.

We will present the diagnostics results for each of the techniques.

Table 1. Characteristics of educational motivation in students of Minin NSPU according to the T.I. Ilyina's method (mean scores)

Academic year	Scales of educational motivation		
	Acquiring knowledge	Mastering the profession	Getting a degree
2 year	7,2	6,8	6,8
3 year	7,3	5,7	6,3
4 year	8,7	4,6	6,8

The data in the table 1 show that the "acquiring knowledge" scale has higher scores compared to "mastering the profession" and "getting a degree" scales. The total score of the characteristics on the first two scale is higher than the characteristic on the "getting a degree" scale in all respondents, which points to the adequate educational motivation.

In the students of the second academic year, the "acquiring knowledge" scale is in the first place (7.2), while "mastering the profession" and "getting a degree" scales have equal scores (6.8). It is possible to hypothesize that, in the second year, motivation for mastering the profession and motivation of getting a degree begin to compete with each other, which leads to a decrease in motivation for mastering the profession in the third year – "mastering the profession" scale is in the third place (5.7), while the scale of "getting a degree" moves to the second place (6.3). The fourth year displays the same tendency as the third.

By the fourth year, a certain increase in motivation for acquiring knowledge is observed. Motivation for acquiring professional knowledge and abilities (mastering the profession) decreases. This type of educational motivation has the highest dispersion in the scores from the 2nd to the 4th year and reaches the minimal scores by the end of education. Motivation for "getting a degree" (formal attitude toward education) remains approximately the same throughout all time of studies. By the end of studies, motivation for getting a degree exceeds motivation for acquiring professional knowledge.

In order to check the conclusions, we used the following methods of mathematical statistics: Friedman's criterion and tendency L-criterion by Page. The calculations were conducted in accordance with the experimental data of each respondent.

Friedman's criterion is equal to 7.16. Critical value for $p = 0.05$ is equal to 6.4. Therefore, the changes in the characteristics from year to year are not random.

Empirical value of tendency L-criterion by Page = 157.

$$L_{cr} = \begin{cases} 160, p = 0.001 \\ 156, p = 0.01, L_{cr} < L_{emp} \\ 153, p = 0.05 \end{cases}$$

Changes of the criteria are not random, level of significance is $p = 0.01$. Therefore, Friedman's and Page's criteria provide the same result. This points to statistically significant differences between the results obtained in the respondents from different academic years.

We made an attempt to establish the relations between the motivation scales. To this end, we used correlations analysis (table 2).

Table 2. Results of the correlation analysis of the motivation scales

Motivation scales	Acquiring knowledge	Mastering the profession	Getting a degree
Acquiring knowledge	1		
Mastering the profession	-0,89	1	
Getting a degree	0,45	-2,18	1

The obtained results allow stating the presence of a reverse linear relation between the scales of "acquiring knowledge" and "mastering the profession". There is no relation between the scales of "mastering the profession" and "getting a degree". The relation between the scales of "getting a degree" and "acquiring knowledge" exists, but it is non-linear; it is impossible to make an unambiguous conclusion about the nature of this relation.

It is interesting to conduct a comparative analysis of the characteristics of educational activity motivation in students who study the same specialty in different pedagogical universities. Answering this question would allow tracing the ways of educational motivation development in students of pedagogical universities. During the study, we conducted correlation analysis of the

results of the study of educational motivation with T.I. Ilyina's method in students of Minin Nizhny Novgorod State Pedagogical University and students of Komi State Pedagogical Institute (based on the results of doctoral research of N.A. Pavlova). The results are presented in table 3.

Table 3. Correlations of educational motivation of students of Minin NSPU and Komi State Pedagogical Institute

Academic year of university studies	Correlation coefficient
2 year	0,81
3 year	0,74
4 year	0,98

The results point to a tight linear correlation between the results of respondents from higher pedagogical educational institutions. This, in turn, might point to the presence of specific traits of pedagogical motivation.

During the study of the dynamics of respondents' antimotivation for education activity, we obtained the results presented in table 4.

Table 4. Specifics of educational activity antimotivation in students of Minin NSPU according to the questionnaire by Ivanova N.V. and Minaeva E.V. (mean scores)

Antimotivation determinants	2 year	3 year	4 year
Spatial-objective	2,85	5,68	2,96
Psychological-didactical	2,89	2,96	3,16
Subjective	3,08	2,83	2,77
Social	2,72	2,78	2,89
Macroenvironmental	2,87	2,69	2,64
Microenvironmental	2,68	2,66	2,88

The data presented in the table allow stating the following. For the second year, the highest score belonged to the subjective antimotivation determinant (3.08) – the field of relationships, and the minimal score – to the microenvironmental determinant (2.68); the respondents gave approximately equal scores to spatial-objective, psychological-didactical and macroenvironmental determinants. For the third year, the first place with the highest score is taken by spatial-objective determinant (5.68), while the lowest score was still attributed to the microenvironmental determinant (2.66). For the fourth year, psychological-didactical antimotivation determinant takes the first place, and macroenvironmental determinant becomes the last.

The significance of spatial-objective determinant increases by the third year, and decreases by the fourth, thus almost reaching the score of the second year. The influence of psychological-

didactical and social antimotivation determinants of educational activity increases by the end of studies. Subjective and macroenvironmental determinants lose their relevance by the fourth year. Microenvironmental antimotivation determinant remains at the same level during second and third years and increases by the fourth year.

In order to evaluate the significance of differences in manifestations of antimotivation determinants upon the transition from one academic year to the next, we used Friedman's and Page's tests. We used experimental data of each of the respondents in order to calculate the criteria.

Friedman's criterion is equal to 11.8. Critical value for $p = 0.01$ is 8.667. Therefore, the changes of the characteristics from one academic year to another are not random.

Empirical value of Page's L-test = 153.

$$L_{cr} = \begin{cases} 160, p = 0.001 \\ 156, p = 0.01 \\ 153, p = 0.05 \end{cases}, L_{cr} = L_{emp}$$

Changes of the criteria are not random with level of significance $p = 0.05$. The value is borderline.

Both criteria provide the same result.

The obtained experimental data allow stating general conclusions about the specifics of the educational activity dynamics and antimotivation in students of a pedagogical university:

- General curiosity and pursuit of knowledge increases from one academic year to the next, which points to a robust position of the individual development values;
 - It is necessary to state the decreasing interest in acquiring professional knowledge and abilities by the end of studies. Revealing the reasons of this phenomena requires additional research;
 - Urge to obtain a degree with formal knowledge acquisition remains a robust position throughout the whole period of studies;
 - There is a reverse linear relation between motivation scales of "knowledge acquisition" and "mastering the profession": the higher is the motivation for acquiring knowledge, the less is the urge to formal acquisition of knowledge for getting a degree, and vice versa;
 - The obtained linear correlation between educational motivation dynamics in students of Minin NSPU and Komi State Pedagogical Institute points to the presence of specific professional traits in the respondents. This allows suggesting the presence of common approaches to educational motivation development in students of higher pedagogical educational institutions;
 - Antimotivation determinants remain rather stable throughout the whole period of studies with minor changes in the characteristics from one academic year to the next. The exception is spatial-objective determinant, which has a peak dynamic of development: it increases significantly by the third year and, by the fourth year, returns to the score similar to the one of the second year.
-

4. Conclusion

Overall, the results of the study point to both positive and negative specifics of educational activity motivation dynamics in students of a pedagogical university. A positive fact is the established increase of the pursuit of knowledge during the university education. The revealed decrease in prospective teachers' motivation for mastering the profession by the end of education is a negative fact that requires special attention and further research. Also, the stability of educational activity antimotivation's manifestation and its determination throughout studying in a pedagogical university present practical interest. We think that the obtained results may become a basis for planning the directions and content of work for optimizing prospective teachers' motivational field during their higher education.

As a perspective for future research of the specifics of dynamics of educational activity

motivation and antimotivation in students of pedagogical universities, we consider conducting longitudinal experiments with the participation of the same people throughout the whole period of university education and comparative analysis of the results with the data of cross-sectional studies in different samples.

References

Brophy, J. (1998). *Motivating students to learn*. Boston: McGraw Hill.

Chayka, V.G. (2002). Struktura uchebnoy motivatsii studentov vuzov i osobennosti ee razvitiya vo vneauditornykh formakh raboty. [Structure of educational motivation in university students and specifics of its development in extracurricular forms of work]. *Zhurnal prikladnoy psikhologii*, 3, 28-31.

Dokutovich, E.Sh. (2007). *Struktura i dinamika motivatsii uchebnoy deyatel'nosti studentov lingvisticheskoy spetsialnosti*. Avtoref. dis. ...kand. psikhol. nauk. [Structure and dynamics of educational activity motivation in students of linguistic specialty. Abstract of doctoral thesis]. Smolensk State University, Smolensk.

D'Ornyei, Z. (2001). *Teaching and researching motivation*. Harlow: Longman.

Gelmont, A.M. (2003). Motivatsiya uchebnoy deyatel'nosti studentov i akademicheskaya uspevaemost v vuze. [Students' motivation for educational activity and academic performance in university]. *Voprosy metodiki prepodavaniya v vuze*, 5, 8-20.

Gordeeva, T.O., Sycheva, O.A. and Osin, E.N. (2013). Vnutrennyaya i vneshnyaya uchebnaya motivatsiya studentov: ee istochniki i vliyanie na psikhologicheskoe blagopoluchie. [Internal and external educational motivation in students: its sources and effect on psychological well-being]. *Voprosy psikhologii*, 1, 35-45.

Ilyin, E.P. (2002). *Motivatsiya i motivy*. [Motivation and motives]. Sankt-Peterburg: Piter.

Ivanova, N. and Minaeva, E. (2015). Antimotivation Determinants of Educational Activity among Pedagogical University Students. *Procedia - Social and Behavioral Sciences*, 214, 59-66.

Ivanova, N.V., Minaeva, E.V. and Kozubay, Yu.V. (2015). Problema izucheniya antimotivatsii uchebnoy deyatel'nosti u studentov pedagogicheskogo universiteta. [The problem of studying educational activity antimotivation in students of a pedagogical university]. *Vestnik Mininskogo universiteta*, 2. Retrieved from: http://www.mininuniver.ru/mediafiles/u/files/Nauch_deyat/Vestnik/2015-10-2/Ivanova_Minaeva.pdf.

Karnaukhov, V.A. (1997). *Osobennosti motivatsionno-smyslovoy sfery lichnosti studentov-pervokursnikov pedagogicheskikh vuzov*. Avtoref. dis. ...kand. psikhol. nauk. [Specifics of motivational and axiological fields of personality in first-year students of pedagogical universities. Abstract of a doctoral thesis]. Belgorod State University, Moscow.

Karpova, E.V. (2009). *Struktura i genesis motivatsionnoy sfery lichnosti v uchebnoy deyatel'nosti*. Dis. ... d-ra psikhol. nauk. [Structure and genesis of motivational field of a personality in educational activity. Doctoral thesis]. Yaroslavl State Pedagogical University named after K. D. Ushinsky, Yaroslavl.

Ketko, S.M. and Pakulina, S.A. (2010). *Metodika diagnostiki motivatsii ucheniya studentov pedagogicheskogo vuza*. [Diagnostic technique for educational motivation in students of a pedagogical university]. *Psikhologicheskaya nauka i obrazovanie*, 1. Retrieved 25.04.2017 from: http://www.psyedu.ru/files/artides/1657/pdf_version.pdf.

Lapkin, M.M. and Yakovleva, M.M. (1996). Motivatsiya uchebnoy deyatel'nosti i uspeshnost obucheniya studentov vuzov. [Educational activity motivation and academic performance of university students]. *Psikhologicheskii zhurnal*, 17(4), 134-140.

Lekerova, G.Zh., Kylyshbaeva, G.B., Mamedekova, L.B., Nurtaeva, G.E. and Tutkabaeva, M.A. (2015). Rezultaty issledovaniya vliyaniya psikhologicheskogo soprovozhdeniya na razvitie

- motivatsii studentov-pedagogov i pedagogov-praktikov. [Results of the study of the effect of psychological assistance on motivation development of pedagogics students and practicing teachers]. *Mezhdunarodnyi zhurnal prikladnykh i fundamentalnykh issledovaniy*, 2-1, 168-172.
- Lens, W. (1991). Motivation and de-motivation in secondary education: student Characteristics. *Learning and Instruction*, 1(2), 45-159.
- Oliver, H. (1995). Influence of motivational factors on performance. *Journal of Instructional Psychology*, 22(1), 45-49.
- Ovchinnikov, M.V. (2008). *Struktura i dinamika motivatsii ucheniya studentov pedagogicheskogo vuza*. Avtoref. dis. ...kand. psikh. nauk. [Structure and dynamics of educational motivation in students of a pedagogical university. Abstract of a doctoral thesis]. Ural State University named after A.M. Gorky, Ekaterinburg.
- Pavlova, N.A. (2005). *Motivatsiya uchebnoy deyatel'nosti studentov pedagogicheskogo vuza*. Avtoref. dis. ...kand. psikh. nauk. [Educational activity motivation in students of a pedagogical university. Abstract of a doctoral thesis]. Yaroslavl State Pedagogical University named after K. D. Ushinsky, Yaroslavl.
- Starodubtseva, L.S. (2006). *Formirovanie motivatsionnoy vkl'yuchennosti studentov v uchebnuyu deyatel'nost kak faktor adaptatsii k professii (Na materiale pedagogicheskogo kolledzha)*. Avtoref. dis. ...kand. psikh. nauk. [Development of students' motivational involvement in the educational activity as a factor of adaptation in the profession (On the material of a pedagogical college). Abstract of a doctoral thesis]. Orenburg State Pedagogical University, Samara.
- Stipek, D. (2002). *Motivating students to learn: integrating theory and practice*. Boston: Allyn and Bacon.
- Vallerand, R.J., Pelletier, L.G., Blais, M.R., Brière, N.M., Sénécal, C. and Vallières, E.F. (1992). The Academic Motivation Scale: A measure of intrinsic, extrinsic and amotivation in education. *Educational and Psychological Measurement*, 52, 1003-1017.

-
1. Minin Nizhny Novgorod State Pedagogical University, Russia, 603600, Nizhny Novgorod, Ulyanova Street, 1.
 2. Minin Nizhny Novgorod State Pedagogical University, Russia, 603600, Nizhny Novgorod, Ulyanova Street, 1. E-mail: eminaeva69@mail.ru
 3. Minin Nizhny Novgorod State Pedagogical University, Russia, 603600, Nizhny Novgorod, Ulyanova Street, 1.
 4. Minin Nizhny Novgorod State Pedagogical University, Russia, 603600, Nizhny Novgorod, Ulyanova Street, 1.
 5. Minin Nizhny Novgorod State Pedagogical University, Russia, 603600, Nizhny Novgorod, Ulyanova Street, 1.
-

Revista ESPACIOS. ISSN 0798 1015
Vol. 38 (Nº 40) Año 2017

[Índice]

[En caso de encontrar algún error en este website favor enviar email a webmaster]

©2017. revistaESPACIOS.com • Derechos Reservados