



Specifics of Educational Activity Anti-motivation in Future Teachers Subject to the Training Period

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ABSTRACT

The study objective was the analysis of specifics of educational activity anti-motivation in students of pedagogical universities - Future teachers in various training periods. 282 students (years 2-5) of Russian and Kazakh pedagogical universities took part in the study. In order to achieve the study objective we used a questionnaire on anti-motivation in educational activity developed by Ivanova, Minayeva for students of pedagogical universities. According to the results of the study, psychodidactic anti-motivation determinant of educational activity has the highest statistically significant impact among the students of various pedagogical universities. It has been proved that there is a correlation dependence between the singled out environmental anti-motivation determinants of educational activity in students of various pedagogical universities. No statistically significant differences between mean values of anti-motivation determinants of educational activity in pedagogical students at various training stages have been discovered. This attests stability in determination of educational activity anti-motivation in respondents from pedagogical universities for the whole training period. Antimotive development quantitative levels have been singled out having different environmental determinants, dynamic specifics of their development in students subject to their training period have been established. The results obtained may be used to optimize educational activity of pedagogical students.

Keywords: Educational Activity Anti-motivation, Student, Pedagogical University

JEL Classifications: I21, I23

1. INTRODUCTION

Optimization of educational activity of present day students, improvement of professional education in the higher educational institutions (universities) are impossible without knowledge of and regard to specifics of students' educational motivation development - Its extent (pronouncedness), structure, determination, dynamics, dominant motives.

Recent psychological studies testify that motivation of student educational motivation is one of the most important prerequisites of their academic achievements (Brophy, 1998; D'Ornyei, 2001;

Gelmont, 2003; Gordeeva, 2013; Lapkin and Yakovleva, 1996; Oliver, 1995; Pavlova, 2005; Stipek, 2002), predictor of their psychological well-being (Gordeeva et al., 2013). Study of educational activity motivation in future teachers - Students of pedagogical universities is very topical, since it is they who in their future professional activity will face the task of ensuring conditions for forming building/creating/developing academic motivation in their students. It should be noted that some Russian authors (Karnaukhov, 1997; Ovchinnikov, 2008; Pavlova, 2005) discovered in their thesis works conceptual and dynamic specifics of educational activity motivation in pedagogical students subject to their training period in the university. In particular,

they discovered alternation of dominant role of professional, educational and cognitive motives in future teachers in different semesters (Pavlova, 2005), significant changes in the educational motivation dynamics at the stages of educational and cognitive activity (years 1-2), educational and research activity (year 3), educational and professional activity (years 4-5), as well as a fall of social significance of the pedagogical profession toward graduation from the university have been established (Ovchinnikov, 2008).

However it has to be noted that studies of specifics of motivational sphere of present day pedagogical students leave anti-motivation of educational activity of future teachers out of consideration. Meanwhile, general attitude to training is governed by the balance of positive motivation of educational activity and its anti-motivation. The problem of anti-motivation (amotivation, demotivation) of educational activity analyzed in works of some authors (Karpova, 2009; Lens, 1991; Vallerand et al., 1992), warrant further research as applied to students of various pedagogical universities. Studies of specifics of educational activity anti-motivation in pedagogical students subject to their training period is topical both theoretically and practically, since, first, the data obtained will complement understanding of motivational sphere of future teachers, second, they will allow to more precisely design and realize programs on forming educational motivation in pedagogical universities.

2. STUDY SCOPE

2.1. Study Objectives and Methods

The objective of our study was the analysis of specifics of educational activity anti-motivation in pedagogical students (future teachers) subject to the training period.

Following Karpova (2008; 2009), we treat anti-motivation of educational activity as a total of educational activity antimotives and a specific motivational subsystem of personality. That said, we understand the antimotive of educational activity neither as an inefficient level of development of an academic motive nor as an absence of the motive, but as a motive with negative valency, featuring a reverse direction towards the educational activity. It is worth emphasizing that antimotives of educational activity are as a rule in their content (laziness, dislike of a teacher or conflicts with him/her), although they can be positive in relation to other activities (student's going in for sports, hobbies, active participation in social life of the higher education institution).

Proceeding from environmental psychology, the environmental approach to education, mentoring and personal development (Deryabo, 1997; Panov, 2004; Yasvin, 2001), we believe that anti-motivation determinants of educational activity in students of higher education institutions can be the educational environment of the said institutions (spatial and objective one, psychodidactic, social and subjective components), as well as microenvironment (family environment) and macroenvironment (society as a whole). By spatial and objective component of the educational environment, following the representatives of environmental psychology, we mean a total of spatial and objective "units" (rooms, furniture, devices, learning aids, attributes) and their

functional characteristics (architecture of buildings, design of rooms, opportunities of their spatial transformation, scope of spatial movement of subjects in them). By psychodidactic component of educational environment, the content of learning is meant (conceptions, programs), methods and technologies of teaching conditioned by aims of the educational process and corresponding with psychological, physiological and age-related particularities of development of the educational process participants. Social component of educational environment is understood to mean a system of relationships, acts of activity and communication and processes of interaction of the educational environment participants. By subjective component of educational environment, we mean personal, age-related, psychophysiological particularities of the educational environment subjects.

In order to achieve the study objective we used a questionnaire on anti-motivation in educational activity of students developed by Ivanova and Minayeva for pedagogical universities (Ivanova and Minaeva, 2015). It should be pointed out that the questionnaire has undergone a pilot study, validity check, and approbation on various samples of students. It should be also pointed out that in developing the questionnaire up-to-date diagnostic tools were analyzed, focused on research of motivational sphere of students and, in particular, of educational activity anti-motivation (academic motivation questionnaire (Vallerand et al., 1992); educational motivation questionnaire (Gordeeva, Sychev and Osin, 2013), comprehensive motivation questionnaire (Karpova, 2009), "Motivation in training of pedagogical students" (Ovchinnikov, 2008).

30 antimotives of educational activity of students were included in the questionnaire, broken down in 6 groups (according to the environmental determinants), containing 5 antimotives each. Antimotives are in random order in the questionnaire. The test subjects were asked to evaluate the listed antimotives of the learning activity on a five-point scale to the extent of their subjective significance (score 1 to mean minimum importance of the factor, score 5 - Maximum).

3. RESULTS AND DISCUSSIONS

282 students of Russian pedagogical universities (Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod State University named after Lobachevsky [Arzamas branch], Omsk State Pedagogical University), as well as a Kazakh pedagogical university (Kazakh National Pedagogical University named after Abai) took part in the study. Sampling covered year 2-4 students of various majors, age 19-21, among them: 108 students of year 2, 95 students of year 3, 79 students years 4-5. Conceptual characteristics were analyzed in the context of indicators of descriptive, inductive statistics and correlations.

First of all, based on the diagnostic results of the total sampling of the test subjects we summed up the scores by singled out determinants of educational activity anti-motivation of students from various pedagogical universities and counted average scores (Table 1).

In order to assess reliability of significant differences between types of anti-motivation determinant in educational activity in

the total sampling of respondents we used Pearson criterion χ^2 . Value χ^2 , critical for the level of statistical significance $P \leq 0.01$, for the degree of freedom $v = 5$ is 15.086, obtained experimental value χ^2 was 37.4. Experimental criterion surpasses by far the Table 1. It testifies to statistically significant differences between anti-motivation determinant groups, and thus - to different significance of anti-motivation determinants for university students. Therefore, we can state that it is the psychodidactic anti-motivation determinant of educational activity that got the highest statistically significant weight among respondents. Obtained results coincide with the earlier conducted experiment with participation of respondents of the other experimental group of a certain university (Ivanova and Minaeva, 2015).

The correlation between anti-motivation determinant groups of educational activity was researched with Spearman's rank correlation coefficient r_s . For a sampling with the quantity of elements $v = 282$ and significance level $P = 0.05$, the critical value of Spearman's coefficient is $\rho_{crit} = 0.3$. Absolute values of obtained correlation coefficients varies between 0.7 and 1, which is above the critical level. Thus, we can state the existing correlation between anti-motivation determinants of educational activity in pedagogical students (Table 2).

Significant weight of psychodidactic anti-motivation determinant of educational activity in students of different pedagogical universities, and thus from different educational environments, existing correlation between types of anti-motivation determinants

Table 1: Extent of anti-motivation determinants of educational activity in students of pedagogical higher education institutions

| Anti-motivation determinants of educational activity | Total of scores | Average score |
|--|-----------------|---------------|
| Spatial and objective component of the educational environment | 3926 | 2.8 |
| Psychodidactic component of the educational environment | 4209 | 3 |
| Social component of the educational environment | 3824 | 2.7 |
| Subjective component of the educational environment | 4022 | 2.8 |
| Microenvironment | 3744 | 2.6 |
| Macroenvironment | 3805 | 2.7 |

Table 2: Experimental Spearman's coefficients of correlations between anti-motivation determinant groups of educational activity in respondents

| Anti-motivation determinants of educational activity | 1 | 2 | 3 | 4 | 5 | 6 |
|--|-----|-----|-----|-----|-----|-----|
| 1 | | 0.9 | 0.8 | 0.7 | 0.9 | 0.9 |
| 2 | 0.9 | | 0.9 | 0.9 | 0.9 | 1 |
| 3 | 0.8 | 0.9 | | 0.7 | 0.7 | 0.9 |
| 4 | 0.7 | 0.9 | 0.7 | | 0.9 | 0.9 |
| 5 | 0.9 | 0.9 | 0.7 | 0.9 | | 0.9 |
| 6 | 0.9 | 1 | 0.9 | 0.9 | 0.9 | |

1 - Spatial and objective component of the educational environment, 2 - Psychodidactic component of the educational environment, 3 - Social component of the educational environment, 4 - Subjective component of the educational environment, 5 - Microenvironment, 6 - Macroenvironment

provides us the ground to state that focused efforts aimed at preventing and mitigating the educational activity anti-motivation in pedagogical universities should be started from optimization of psychodidactic component of the educational environment.

Second, based on the results of conducted diagnostics we calculated average scores for the singled out environmental anti-motivation determinants in pedagogical students of different years (Table 3).

To identify statistically significant differences between average indicators of anti-motivation determinants of the education activity in students of different years we used methods of mathematical statistics H - Kruskal-Wallis criterion and U - Mann-Whitney criterion for the level of statistical significance $P \leq 0.05$, for the degree of freedom $v = 281$. The analysis of results showed no statistically significant differences between mean values of anti-motivation determinants of educational activity in pedagogical students at various training stages.

Based on this fact we believe we may acknowledge relative stability in determining anti-motivation of the educational activity and its extent in respondents from pedagogical universities of different years. In its turn, is gives grounds to assume sufficient awareness of respondents, when choosing their future profession.

Third, we considered individual specifics in antimotives of the educational activity associated with various environmental determinants, subject to the training stage of students in pedagogical universities.

For this purpose we identified quantitative development levels of antimotives having various environmental determination. Maximum score that respondents could obtain in each determinant group was 25, minimum - 5. Thus, each level has its score characteristic:

- I Level (low) - score between 5 and 11
- II Level (medium) - score between 12 and 18
- III Level (high) - score between 19 and 25

The data obtained was expressed in percentage and summarized in Table 4.

Analysis of results testifies to the fact that distribution of the tested students within each training stage (year) has a general trend - Over a half of respondents demonstrate Level II of any types of anti-motivation determinants of the educational activity.

Let us review in detail dynamic specifics in each group of antimotives having different environmental determination.

3.1. Spatial and Objective Anti-motivation Determinant

The number of students with Level I of spatial and objective anti-motivation determinant slightly grows from year to year (respectively: 22.2%; 25.2%; 27.8%). The number of respondents with Level II grows since year 2 to year 3 (from 61.1% to 66.3%) and goes down in years 4 and 5 reaching the lowest value as compared to year 2 - 58.2%. The number of respondents with

Table 3: Average score of anti-motivation determinants of educational activity in pedagogical students by year

| Years | Anti-motivation determinants of educational activity | | | | | |
|---------|--|-----|-----|-----|-----|-----|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 2 | 2.8 | 3 | 2.8 | 2.9 | 2.6 | 2.7 |
| 3 | 2.7 | 2.9 | 2.8 | 2.7 | 2.6 | 2.6 |
| 4 and 5 | 2.8 | 3.1 | 2.6 | 2.9 | 2.6 | 2.9 |

1 - Spatial and objective component of the educational environment, 2 - Psychodidactic component of the educational environment, 3 - Social component of the educational environment, 4 - Subjective component of the educational environment, 5 - Microenvironment, 6 - Macroenvironment

Table 4: Percentage of pedagogical students by level of anti-motivation determinants in the educational activity

| Years | Level | Anti-motivation determinants of educational activity | | | | | |
|---------|-------|--|------|-------|------|------|------|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| 2 | I | 22.2 | 16.6 | 32.4 | 25.9 | 29.6 | 28.7 |
| | II | 61.1 | 62.9 | 56.48 | 53.7 | 60.1 | 65.7 |
| | III | 16.6 | 20.3 | 11.1 | 20.3 | 10.1 | 5.5 |
| 3 | I | 25.2 | 25.2 | 35.7 | 35.7 | 36.8 | 37.8 |
| | II | 66.3 | 61 | 52.6 | 42.5 | 51.5 | 52.6 |
| | III | 8.4 | 13.6 | 10.1 | 15.7 | 10.1 | 9.4 |
| 4 and 5 | I | 27.8 | 13.9 | 37.9 | 26.5 | 35.4 | 16.4 |
| | II | 58.2 | 60.7 | 53.1 | 60.7 | 54.4 | 69.6 |
| | III | 13.9 | 25.3 | 8.8 | 12.6 | 10.1 | 13.9 |

1 - Spatial and objective component of the educational environment, 2 - Psychodidactic component of the educational environment, 3 - Social component of the educational environment, 4 - Subjective component of the educational environment, 5 - Microenvironment, 6 - Macroenvironment

Level III since year 2 to year 3 falls almost twice (from 16.6% to 8.4% respectively), then at the end of the training it grows up - 13.9%, but does not reach the value of year 2. Since the number of students demonstrating the first level gradually grows, and the number of students with the second and the third level falls toward the end of training, we may assume that this type of anti-motivation determinant gradually loses its significance to the respondents.

3.2. Psychodidactic Anti-motivation Determinant

The number of students with Level I of psychodidactic determinant grows up in years 2 and 3 from 16.6% to 25.2%, then it falls down significantly to 13.9%. The number of respondents with Level II goes down regularly, but slightly from year to year (respectively: 62.9%; 61.6%; 60.7%). The number of respondents with Level III between years 2 and 3 goes down significantly (13.6%), then in years 4 and 5 grows up significantly, surpassing the value of the first year (25.3%). It should be noted that Level III of psychodidactic determinant showed the highest number of respondents, which may testify to a higher significance of this determinant to the students.

3.3. Social Anti-motivation Determinant

The number of respondents with Level I goes up regularly, but slightly from year to year (respectively: 32.4%; 35.7%; 37.9%). The number of students with Level II varies slightly (respectively: 56.4%; 52.6%; 53.1%). The number of respondents with determinant Level III goes down gradually and slightly (respectively: 11.1%; 10.1%; 8.8%). Analysis of indicators suggests that this determinant stays approximately at the same level of significance for the students during the whole period of training.

3.4. Subjective Anti-motivation Determinant

The number of students with Level I of the determinant grows up in years 2 and 3 (from 25.9% to 35.78% respectively), then it goes down significantly to 26.5%. The number of respondents with Level II goes down at first (from 53.7% to 42.5%), then goes up significantly in years 4 and 5 (up to 60.7%). The number of respondents with Level III goes down significantly from year to year (20.3%; 15.7%; 12.6% respectively). The obtained results testify to weakening of significance of this determinant for the students.

3.5. Macroenvironment

The number of students with Level I of the determinant grows up in years 2 and 3 (from 28.7% to 37.8%), then it goes down significantly (down to 16.4%). The number of respondents with Level II goes down at first (from 65.7% to 52.6%), then goes up in years 4 and 5 (up to 69.6%). The number of respondents with Level III goes up from year to year (5.5%; 9.4%; 13.9% respectively). The data testifies to strengthening of macroenvironment anti-motivation determinant for the students subject to the training stage.

3.6. Microenvironment

The number of students with Level I of the determinant grows up in years 2 and 3 (from 28.7% to 36.8%), then it goes down slightly (35.4%). The number of respondents with Level II goes down at first (from 60.1% to 51.5%), then goes up to 54.4% in years 4 and 5. The number of respondents with Level III remains the same (10.1%) in all years of training.

4. CONCLUSION

The analysis of the aggregate of psychological indicators obtained in the study gives the grounds to make the following overall and specific conclusions.

Psychodidactic anti-motivation determinant of educational activity has the highest statistically significant impact among the students of various pedagogical universities. This conclusion is supported by the results of the study conducted earlier based on a sampling of students from a certain pedagogical university (Ivanova et al., 2015). It has been proved that there is a correlation between different groups of anti-motivation determinants of educational activity in students of various pedagogical universities. This identified feature in anti-motivation determination of educational activity of the future teachers shall be accounted for in development of programs aimed at preventing and mitigating the educational activity anti-motivation in pedagogical universities.

The analysis of results showed no statistically significant differences between mean values of anti-motivation determinants of educational activity in pedagogical students at various training stages. This fact testifies to relative stability in the educational activity anti-motivation determination and its extent with respondents from pedagogical universities during the whole training period and may be one of the grounds to build a vocational guidance diagnostic tool set on.

Based on the identified quantitative development levels of antimotives having different environmental determination it

was established that over a half of respondents demonstrate Level II of any types of the educational activity anti-motivation determinants. Besides, dynamic specifics were identified in occurrence of anti-motivation determinants in the educational activity of students subject to the training period. Spatial and objective, as well as subjective anti-motivation determinants lose their significance for pedagogical students towards the end of the training period. Psychodidactic one gains significance toward the end of the training. Besides, towards the end of the training in a pedagogical university an increase in significance of macroenvironment for the respondents as an educational activity anti-motivation determinant is observed. Social anti-motivation determinant and microenvironment as an educational activity anti-motivation determinant remain stable in their significance to the respondents during the whole training period of students in pedagogical universities.

In general, knowledge of specifics of educational activity anti-motivation in students of pedagogical universities at different stages of training may be used to optimize students' educational activity and to improve professional education.

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