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DYNAMICS OF EDUCATIONAL MOTIVATION IN THE LEARNING PROCESS AMONG STUDENTS OF A HIGHER EDUCATION INSTITUTION

Research article

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Abstract

The article focuses on students' motivational process and the problems of learning and cognitive motives formation. The aim of this study is to analyze the dynamics of students' learning motivation and to identify the key factors of successful learning. Much attention is given to students' and senior pupil's dominant learning needs. The authors use methods of comparative analysis, statistics; content analysis of scientific literature; sociological research methods, survey, experiment. The survey results are presented in tabular form and graphically. The results of the first-year students' leading motives study show the dynamics of increasing the motivation level in the first year compared to the period of the 11th grade (by 25%). The article concludes that the most students' learning motives tend to increase. The prospect of the study is further consideration of various ways of motivating university students' purposeful and regular activities.

Keywords: motivation, learning motives, student's self-assessment, educational activity, key factors of successful learning.

ДИНАМИКА УЧЕБНОЙ МОТИВАЦИИ В ПРОЦЕССЕ ОБУЧЕНИЯ У СТУДЕНТОВ ВЫСШЕГО УЧЕБНОГО ЗАВЕДЕНИЯ

Научная статья

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Аннотация

Статья посвящена изучению мотивационного процесса студентов и проблемам формирования учебных и познавательных мотивов. Целью данной работы было выяснить, какова динамика учебной мотивации студентов и выявить ключевые факторы успешного обучения. Большое внимание уделяется доминирующим учебным потребностям студентов и школьников. В работе использованы методы сравнительного анализа, статистики; контент-анализ научной литературы; социологические методы исследования, опрос, эксперимент. Результаты опроса представлены в табличной форме и в виде диаграмм. Результаты исследования ведущих мотивов первокурсников показывают динамику повышения уровня мотивации на первом курсе по сравнению с периодом 11-го класса (на 25%). У большинства студентов мотивы обучения имеют тенденцию к увеличению. Перспективой исследования является дальнейшее рассмотрение различных способов мотивации целенаправленной и регулярной деятельности студентов вузов.

Ключевые слова: мотивация, мотивы обучения, самооценка обучаемого, учебная деятельность, ключевые факторы успешного обучения.

Introduction

Modernization of the national higher education system was announced as a strategic initiative in the annual presidential address to the Federal Assembly. Significant changes are overdue in view of the new personnel needs of the economy and technological transformations. It is necessary to synthesize the best experience of the Soviet education system and successful practices of recent decades.

The strategy of economic security, scientific and technological development of the Russian Federation for the period up to 2030 [4], [5] actualize the role of lifelong learning and innovative processes in the formation of professional competencies. Among others, they mention the task of creating opportunities for identifying and educating talented youth, building a successful career in science, technology and technological entrepreneurship, ensuring the preservation and development of the intellectual potential of science, increasing the prestige of the profession of a scientist and engineer. This determines the need

to use modern methods and technologies and the important role of the motivational sphere in the professional training of competitive specialists.

This paper is aimed to study the dynamics of students' learning motivation and to identify key factors for successful learning. The article reveals the essence of the students' motivational process, examines the problems of learning and cognitive motives formation, identifies the students' and senior pupils' dominant learning needs, and the key factors affecting the effectiveness of the educational process.

The motives and targets of professional activity are the first condition for building a motivational process. They determine the quality of not only the professional sphere of a person, but also the educational one as its component. E.F. Zeer emphasizes that educational activity presupposes the presence of cognitive motivation, and practical activity – early professional motivation [10], [11, P. 29]. Successful students' activity is inextricably linked with motivation [6, P. 266]. Modern educational standards at all levels focus on a system-active approach (L.S. Vygotsky, A.N. Leontiev, D. B. Elkonin, V.V. Davydov, G.A. Zuckerman, etc.), clear requirements for subject results in each academic subject area. The motivation of students in any educational setting depends on a wide range of individual factors, and it is important for educators to recognize these diverse motivations in order to create personalized learning environments that will inspire students to be lifelong learners.

The study of the motivation theories evolutions (A. Maslow, F. Herzberg, E. Locke, V. Vroom, S. Adams) allowed us to conclude about the role of the goal-setting process in undergraduates' training and graduates' professional activity. The students' intentions and commitment to learning goals depend on their awareness of the need for cognitive activity.

It is interesting, in this regard, to compare the motives of senior pupils' educational activities and those of higher education institutions students, who should have a positive motivational experience, motives for cognitive activity and self-learning.

Studying at the university is a new stage in a student's development and professional formation. In order for this activity to be effective, it is necessary to form learning motivation and motivation for professional search and growth. The student wants to perform socially significant and socially evaluated activities that are practically realized. One of the most important problems of learning is the formation of motivational mechanisms and external factors that stimulate the process of learning and self-learning [3]. The problem of educational and cognitive motives formation acquires special significance for socio-psychological adaptation in higher education.

At the first stage of adaptation at school, the motives associated with cognition and learning have low value, and the cognitive motivation of learning and arbitrary regulation of activity develop gradually during the educational process. L.I. Bozhovich, A.V. Zaporozhets, D.B. Elkonin believed that school adaptation is determined by a child's willingness to change his social status. The child himself changes his personal environment, thus adapting to the situation [9, P. 58]. At the university, the defining theories for ensuring the effectiveness of training are procedural and meaningful concepts of motivation considering the importance of the external environment and the goals of successful employment and professional realization [2, P. 14].

Research methods and principles

The object of the study is the higher education students' learning motivation.

The subject is the dynamics of learning motivation depending on various motivating and demotivating factors.

The paper uses methods of comparative analysis, statistics; content analysis of scientific literature aimed at identifying motivational mechanisms in the learning process; sociological research methods, survey, experiment. The questionnaire had instructions and 12 questions compiled on the basis of the questionnaire "Orientation to knowledge acquisition" (E.P. Ilyin, N.A. Kurdyukova).

When processing the results, 1 point was awarded for each answer according to the key. The motivation to acquire knowledge was evidenced by the answers "A" to questions 1-6, 8-11 and the answers "B" to questions 7 and 12.

The sum of the points received (from 0 to 12) indicates the degree of motivation to acquire knowledge from each subject.

12 – 9 p. Indicates a high level of motivation

8 – 5 p. Indicates an average level of motivation

4 -1 p. Indicates a low level of motivation.

The texts of the instruction and the questionnaire are given below (see Tables 1, 2).

2.1. Instruction

There are some statements – questions with paired answers. You need to choose between two answers and write the letter (a or b) corresponding to the chosen answer next to the position of the question.

Table 1 - Text of questionnaire for the period of the 11th grade

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Survey/Questionnaire	a)	b)
1. <i>After receiving a bad grade, you:</i> a) continue to prepare conscientiously for next classes; b) do not prepare carefully, as interest in the cognitive process is lost.		
2. <i>After getting a good grade, you:</i> a) continue to prepare		

conscientiously for next classes; b) don't prepare conscientiously as you are sure that you won't be asked any more.		
3. <i>Have you ever been dissatisfied with the answer, but not with the grade:</i> a) yes; b) no.		
4. <i>What was studying in the 11th grade for you:</i> a) learning new things; b) a burdensome activity.		
5. <i>Did your grades depend on thorough preparations for the classes:</i> a) yes; b) no.		
6. <i>After getting a bad grade, have you analyzed what you did in the wrong way:</i> a) yes; b) no.		
7. <i>Did your desire to prepare your homework depend on whether you get marks for it:</i> a) yes; b) no.		
8. <i>Was it easy for you to get involved in studies after summer holidays:</i> a) yes; b) no.		
9. <i>Have you been upset that lessons were canceled due to the teacher's illness:</i> a) yes; b) no.		
10. <i>When you moved to the 11th grade, were you aware of the responsibility/concern for writing the Unified State Exam:</i> a) yes; b) no.		
11. <i>Which do you think is better - to study or to get sick:</i> a) to study; b) to get sick.		
12. <i>What is more important for you — grades or knowledge:</i> a) grades; b) knowledge.		

Table 2 - Text of questionnaire for the period of the first year study

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Survey/Questionnaire	a)	b)
1. <i>Having received a task on the subject, you:</i> a) immediately start preparing		

for classes; b) postpone preparation for later, prepare at the last moment.		
2. <i>After getting a bad grade for the exam, you:</i> a) continue to prepare conscientiously for next classes; b) do not prepare carefully, as interest in the cognitive process is lost.		
3. <i>Does it happen that you are dissatisfied with the answer, and not with the assessment:</i> a) yes; b) no.		
4. <i>What is studying for you:</i> a) learning new things; b) burdensome activity.		
5. <i>Do your grades depend on the thoroughness of preparation for the lecture/ practical class:</i> a) yes; b) no.		
6. <i>After getting low results/low score do you analyze what you did in the wrong way:</i> a) yes; b) no.		
7. <i>Your desire to study is related to working for the future / constantly receiving a scholarship:</i> a) yes; b) no.		
8. <i>Is it important for you to study successfully, pass exams for "good" and "excellent":</i> a) yes; b) no.		
9. <i>Do you strive to achieve the teachers' respect or to be an example for fellow students:</i> a) yes; b) no.		
10. <i>Are you aware of responsibility/uneasiness before taking tests / exams:</i> a) yes; b) no.		
11. <i>Which do you think is better - to study or to work:</i> a) to study; b) to work.		
12. <i>What is more important for you — grades or professional knowledge:</i> a) grades; b) professional knowledge.		

Main results

The authors conducted the study at Reshetnev Siberian State University of science and technology and Siberian Federal University in Krasnoyarsk. The respondents to a survey were 60 first-year and high school students (30 boys and 30 girls). The research was aimed at identifying the first-year students' educational activities motives, determining the leading motives and their dynamics in comparison with the high school graduates' motives.

To solve research problems, comparative and correlation analyses of the data were carried out. The survey results are presented in figures 1 and 2. The question numbers of the corresponding survey / questionnaire are located diagonally, the number of students (in % ratio) who chose the answer option from the questionnaire: "A" or "B" are in vertical direction. The answers "A", highlighted in blue, indicate motivation to acquire knowledge. Comparing the results of surveys for the periods of the 11th grade of high school and the 1st year of university, the authors came to the conclusion that the motivation to acquire knowledge has increased significantly, as evidenced by the boundaries of the answers "A" in the questionnaires for the period of the first year. Motivation levels are presented as a percentage in Figures 3 and 4.

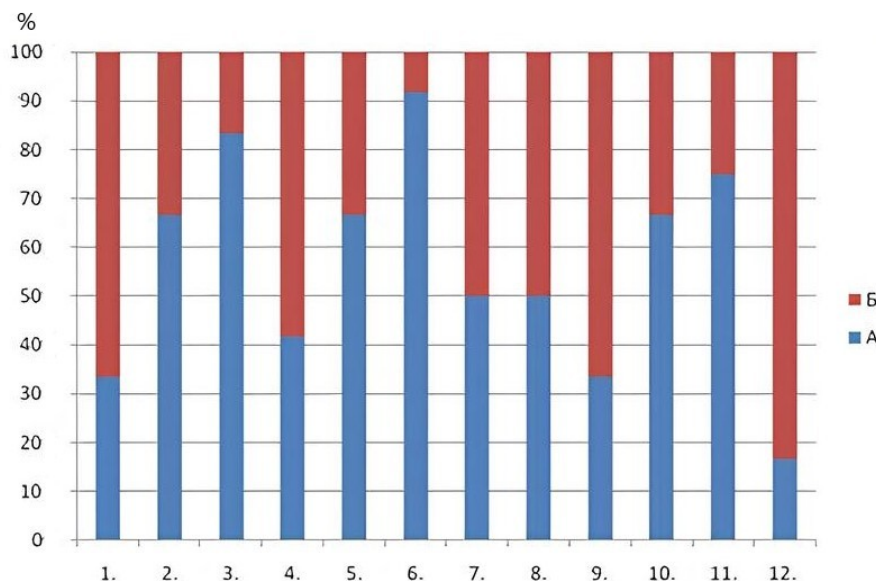


Figure 1 - Survey results for the period of the 11th grade
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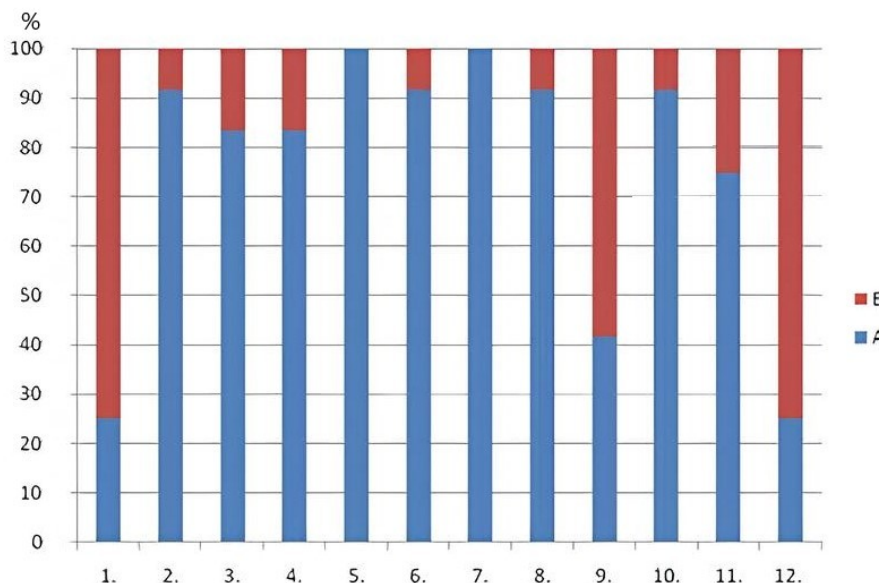


Figure 2 - Survey results for the period of the 1st year at university
DOI: <https://doi.org/10.60797/IRJ.2024.146.89.4>

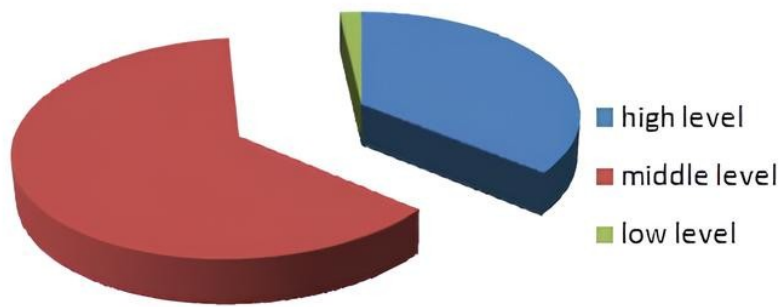


Figure 3 - Motivation levels for the period of the 11th grade
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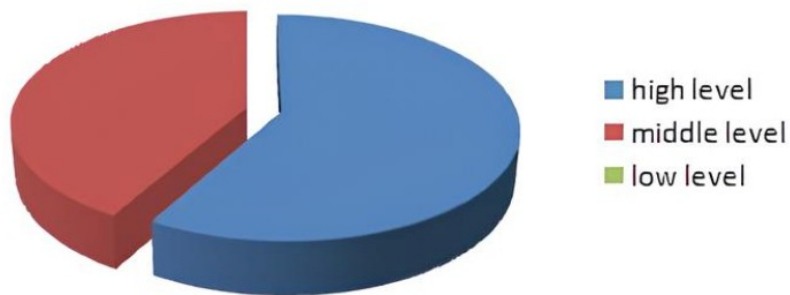


Figure 4 - Motivation levels for the period of the 1st year at university
DOI: <https://doi.org/10.60797/IRJ.2024.146.89.6>

The majority of respondents for the period of the 11th grade have demonstrated the average level of motivation – 58.33% (35 people). 33.33% (20 people) had a high level of motivation and 8.33% (5 people) had a low level of motivation.

During the 1st year at university, there is a positive correlation, i.e. an increase in the level of motivation and a corresponding upward transition to medium and high levels by 15 students (25%): high level 58.33% (35 people), middle level 41.66% (25 people).

The results of the first-year students’ leading motives study are presented in Table 3: the data in the table show the dynamics of increasing the motivation level in the first year compared to the period of the 11th grade and allow us to conclude that a low level of motivation did not remain in any of the students; a high level of motivation was revealed in 15 more students, it shows an increase of 25% overall: from 20 (33.33%) to 35 (58.34%). The number of students with the middle level of motivation decreased from 58.33% to 41.66% due to the up-coming transition.

Table 3 - Survey results

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Level of motivation		the period of the 11th grade	the period of the 1st year study at university
High level	n	20	35
	%	33.33	58.34
Middle level	n	35	25
	%	58.33	41.66
Low level	n	5	0

	%	8.33	0
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Discussion

Thus, it can be concluded that the majority of students have a learning motive that continues to form, with a tendency to increase. The leading motives of studying are undoubtedly social – the parents', teachers' and professors' praise, fellow students' approval, a good assessment and receiving a scholarship.

Perhaps the motivation of university students is higher for several reasons:

1. A clearer goal: University students have a concrete idea of what profession they want to pursue in the future. This clear goal encourages them to study and helps to maintain motivation.
2. High expectations: Universities are aimed at training specialists in a certain field. Students realize that they are expected to have a high level of knowledge and skills, so they feel great responsibility and try to perform their tasks at a high level.
3. Greater independence: University students usually have more freedom to choose subjects and organize time than high school students. This helps them develop self-discipline and learn independence, which can increase their motivation.
4. A more serious approach to education: University students already realize that their academic success can directly affect their future career and professional growth. This motivates them to pay more attention to their studies and strive to achieve high results.
5. Interaction with fellow students: at the university, students are often surrounded by like-minded people who are also focused on professional development. This creates a motivating atmosphere where they support and inspire each other to achieve success.

However, it is important to note that motivation may differ from student to student and from high school student to high school student. Some high school students may be highly motivated, especially if they have clear goals and a passion for the field they are studying.

Conclusion

Motivation in learning is an important aspect for both students in high school and university. While there might be some differences in motivation factors between these two groups, the fundamental principles for motivating students are similar.

In general, motivation is impacted by a variety of factors. Internal psychological factors such as personal interests, curiosity, and desire for knowledge are important for both high school students and university students. Additionally, external factors such as rewards, recognition, and social support can also motivate students to learn.

However, the priorities and interests of high school students and university students may differ. For high school students, motivation might be more tied to social pressures, competition, and obtaining good grades to qualify for university. Meanwhile, university students might be more motivated by career aspirations, research opportunities, or the fulfillment of intrinsic goals.

The results obtained are of practical value, both for teachers and for psychologists and parents. High motivation can play the role of a compensatory factor in the case of insufficiently high abilities or insufficient stock of the required knowledge, skills and abilities of students. However, even a high level of student's abilities cannot compensate for his low educational motivation or lack thereof and, thus, cannot lead to the success of educational activities. The prospect of the study is further consideration of various ways of motivating university students' purposeful and regular activities.

Конфликт интересов

Не указан.

Рецензия

Все статьи проходят рецензирование. Но рецензент или автор статьи предпочли не публиковать рецензию к этой статье в открытом доступе. Рецензия может быть предоставлена компетентным органам по запросу.

Conflict of Interest

None declared.

Review

All articles are peer-reviewed. But the reviewer or the author of the article chose not to publish a review of this article in the public domain. The review can be provided to the competent authorities upon request.

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