

PSYCHOLOGICAL MECHANISMS OF FORMING RESEARCH MOTIVATION AMONG STUDENTS

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Abstract. *The article examines the psychological mechanisms underlying the formation of research motivation among students in higher education settings. The significance of intrinsic motivation, self-efficacy, cognitive interest, and reflection is substantiated as key factors in engaging students in research activities. Contemporary psycho-pedagogical approaches to stimulating students' scientific activity are analyzed. The results of a theoretical analysis are presented, and a model of research motivation formation is proposed, including cognitive, emotional, and behavioral components. The study concludes that comprehensive pedagogical influence aimed at developing a stable research orientation among students is necessary.*

Keywords: *research motivation, students, scientific activity, self-efficacy, cognitive interest, reflection, pedagogical support.*

The modern higher education system is focused not only on the transfer of knowledge, but also on the formation of students' ability for independent scientific research, critical thinking and innovation. In these conditions, the problem of forming students' research motivation as one of the key factors of their professional and personal development becomes particularly relevant.

Despite a significant number of studies devoted to the motivation of learning, the problem of stimulating the research activity of students remains insufficiently developed. This is due to the complexity and multicomponent nature of this phenomenon, which includes both cognitive and emotional-personal aspects. This phenomenon requires a comprehensive interdisciplinary analysis combining the approaches of pedagogy, psychology and theory of education. Of particular importance is the identification of those psychological mechanisms that not only initiate, but also support the steady research activity of students throughout the entire period of study



at the university.

It should be noted that research motivation is not formed spontaneously, but is the result of purposeful pedagogical influence and active involvement of the student in the educational environment. In this context, factors such as the nature of educational assignments, the style of pedagogical interaction, the availability of scientific mentoring and the possibility of practical application of acquired knowledge play an important role.

From a psychological point of view, research motivation is closely related to the development of internal motivation of a personality, which, unlike external motivation, is based on cognitive interest, the desire for self-realization and satisfaction from the process of activity. It is internal motivation that ensures a higher level of student involvement in scientific work and contributes to the formation of a sustained interest in research activities.

In addition, an important component is the formation of students' sense of self-efficacy, which reflects their confidence in their ability to successfully cope with research tasks. A low level of self-efficacy can act as a serious barrier to inclusion in scientific activities, even if there is a high cognitive potential.

An equally significant factor is cognitive interest, which performs the function of an internal motivator of activity. Its development is possible if problematic situations are created that stimulate intellectual tension and the search for new knowledge. In this process, a special role is played by a teacher who is able to organize educational activities in such a way that they arouse students' sustained interest and desire for research. The role of reflection as a mechanism for understanding one's own activities should also be taken into account. The development of reflective skills allows students to analyze their achievements and difficulties, adjust behavior strategies and improve the effectiveness of scientific work.

Theoretical foundations of the research . Research motivation is considered as a set of internal and external motivations that guide a student to participate in research activities. Within the framework of the psychological and pedagogical approach, special attention is paid to internal motivation related to the interest in knowledge, the desire for self-realization and development.

One of the key concepts is self-efficacy, reflecting a student's confidence in their own ability to successfully complete research tasks. A high level of self-efficacy helps to increase activity, perseverance and resilience to difficulties.



An important role is also played by cognitive interest, which acts as an emotionally colored attitude to the process of cognition. Its development is associated with the creation of problematic situations that stimulate the intellectual activity of students.

Based on the analysis of scientific literature, the following key psychological mechanisms can be identified:

1. The mechanism of internal motivation. It is formed on the basis of satisfaction of basic psychological needs: autonomy, competence and belonging. Students who have an intrinsic interest in research activities demonstrate a higher level of engagement. The mechanism of internal motivation acts as a basic one that determines the orientation of a person towards cognitive activity. However, its effectiveness is significantly enhanced in the presence of developed self-efficacy, since even with a high interest in research, a student can avoid difficult tasks with insufficient confidence in their own abilities.

2. The mechanism of self-efficacy. Self-confidence promotes acceptance of difficult tasks and increases resilience to failure. It is formed through successful experience, teacher support and positive feedback. The development of self-efficacy is gradual and closely related to the accumulation of positive research experience. Each successfully completed task related to the analysis of scientific information, conducting empirical research or presenting the results strengthens the student's self-confidence and builds inner readiness for more complex scientific challenges.

Pedagogical support plays an important role in this process. Support from the teacher, expressed in constructive criticism, methodological assistance and emotional approval, helps to reduce anxiety and form a positive academic self-esteem. Timely feedback is especially important, allowing the student to understand the dynamics of his own development and adjust research actions.

3. The mechanism of cognitive involvement. It is associated with the active participation of the student in the learning process. It includes the development of critical thinking, analysis and synthesis of information. Cognitive engagement, in turn, provides the content side of research activities. It manifests itself in the student's ability to independently pose problems, hypothesize and find solutions. This mechanism is closely related to the development of critical thinking and intellectual initiative.

4. Emotional-value mechanism. It involves the formation of a positive attitude towards scientific activity, the development of interest and satisfaction from the



research process. The positive emotions that arise during the research process contribute to the formation of stable motivational attitudes and increase the likelihood of a student's re-inclusion in scientific work.

5. The reflexive mechanism. It provides students with an understanding of their own activities, an analysis of successes and mistakes, and the formation of an adequate self-assessment. Through reflection, the student gets the opportunity to analyze his own experience, identify the causes of successes and failures, and adjust further actions. This contributes to the development of independence and responsibility for the results of their scientific activities.

The identified psychological mechanisms do not function in isolation, but in close interrelation, forming an integral system that ensures the formation of stable research motivation among students. Their integration allows not only to initiate interest in scientific activity, but also to maintain it for a long time. Thus, the effectiveness of the formation of research motivation is largely determined by the degree of development of each of these mechanisms and the nature of their interaction. This requires the educational system to purposefully create conditions conducive to their integrated development in the learning process of students.

Pedagogical conditions for the formation of research motivation. Effective development of research motivation is possible if the following conditions are met:

- creation of a developing educational environment;
- The use of problem-based and project-based learning;
- Individualization of the educational process;
- Support for student initiatives;
- organization of scientific mentoring.

Of particular importance is the role of the teacher, who acts not only as a source of knowledge, but also as a facilitator of scientific activity, creating conditions for students' self-realization.

The implementation of these pedagogical conditions presupposes a systematic and purposeful educational impact aimed at activating the inner potential of students.

The creation of a developing educational environment is a basic condition for ensuring the inclusion of students in research activities. Such an environment is characterized by openness, variability of educational trajectories, availability of scientific resources and stimulation of cognitive activity.

The use of problem-based and project-based learning contributes to the formation of students' research position, which involves an independent search for



solutions and a critical understanding of the educational material. These learning technologies create conditions for modeling real scientific tasks, which increases the level of student engagement and contributes to the development of their analytical and research competencies.

The individualization of the educational process makes it possible to take into account the personal characteristics, level of training and interests of students, which is an important factor in increasing their motivation for scientific activity.

The differentiated approach ensures a more accurate correspondence of educational tasks to the capabilities and needs of students, which contributes to their successful inclusion in research work.

Supporting students' initiatives is a significant pedagogical condition aimed at developing their independence and responsibility for the results of their own activities. Encouraging research initiatives, participating in scientific competitions, conferences and projects contributes to the development of sustained interest in science and strengthening internal motivation.

The organization of scientific mentoring plays an important role in the professional development of students. Interaction with the supervisor provides not only the transfer of knowledge and experience, but also psychological support, which is especially important at the initial stages of inclusion in research activities. Mentoring helps to build self-confidence and develop research competencies.

Of particular importance in the system of formation of research motivation is the activity of a teacher who performs the function of a facilitator of the educational process. Its task is to create conditions conducive to unlocking the scientific potential of students, stimulating their cognitive activity and accompanying their individual development trajectory. Effective pedagogical interaction contributes to the formation of a stable research orientation of the student's personality and an increase in the level of his scientific activity.

A model for the formation of research motivation. The proposed model includes three interrelated components:

Cognitive component — knowledge, research skills and skills;

Emotional component — interest, satisfaction, positive attitude towards science;

The behavioral component is active participation in scientific activities, initiative, independence.

This model assumes a step-by-step development of motivation: from external



stimulation to internal interest.

The analysis shows that the formation of research motivation requires an integrated approach that takes into account the individual characteristics of students. The most effective methods are those aimed at developing internal motivation and self-efficacy.

Practice shows that the inclusion of students in real scientific projects, participation in conferences and publication activities significantly increases their interest in research work.

Thus, students' research motivation is formed under the influence of a complex of psychological mechanisms, including internal motivation, self-efficacy, cognitive interest and reflection. Effective stimulation of scientific activity is possible with the creation of favorable pedagogical conditions and the active role of the teacher. The prospects for further research are related to the development of diagnostic tools for assessing the level of research motivation and the introduction of innovative pedagogical technologies.

Literature:

1. Bozhovich L.I. Personality and its formation in childhood. Moscow: Prosveshchenie, 2008.
2. Zimnaya I.A. Pedagogical psychology. Moscow: Logos, 2010.
3. Markova A.K. Formation of teaching motivation. Moscow: Prosveshchenie, 1990.
4. Bandura A. Theory of social learning. Saint Petersburg: Eurasia, 2000.
5. Desi E., Ryan R. Internal motivation and self—determination of personality. Moscow: Smysl, 2011.
6. Leontiev A.N. Activity. Conscience. Personality. Moscow: Politizdat, 1975.
7. Rubinstein S.L. Fundamentals of general psychology. — St. Petersburg: Peter, 2002.