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Psychological prerequisites and barriers to innovative activity of teachers

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Abstract

Context and relevance. The success of pedagogical activity partly depends on the availability and level of professional competencies, as well as the initiative in the continuous self-development of teachers. **Objective.** The analysis examines the relationship between the indicators of psychological characteristics of personality and the level of readiness of teachers for innovation. **Methods and materials.** The study participants were teachers of educational institutions in Belgorod (n = 120), of whom: 77 women, 43 men. The study of the current state of teachers' readiness for innovation was conducted using the methodology "Assessment of a teacher's readiness to participate in innovation" (V.A. Slastenin); the questionnaire "Big Five" (5-PFQ) R. McCrae, P. Costa; the questionnaire "Style of self-regulation of behavior-SSP-98" (V.I. Morosanova); questionnaires "Barriers preventing the development of innovations" (T.V. Chirkova). **Results.** The results showed that 33% of teachers of educational institutions are ready for innovation, they are characterized by high rates of self-regulation and regulatory personality traits; openness to experience, extraversion and benevolence. **Conclusions.** A high level of general self-regulation is one of the main conditions for success in the development and implementation of new types of activities. In this regard, the development of self-regulation processes will help to increase the level of psychological readiness of teachers for innovation.

Keywords: innovative activity of a teacher, conscious self-regulation of activity, barriers preventing innovative activity

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Психологические предпосылки и барьеры инновационной активности педагогов

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Резюме

Контекст и актуальность. Успешность педагогической деятельности отчасти зависит от наличия и уровня профессиональных компетенций, а также инициативы в непрерывном саморазвитии педагогов. **Цель.** Выявить связи между показателями психологических характеристик личности и уровнем готовности педагогов к инновационной деятельности. **Методы и материалы**. Участниками исследования выступили педагоги общеобразовательных учреждений г. Белгорода (n = 120), из них: 77 женщин, 43 мужчины. Исследование современного состояния готовности педагогов к инновационной деятельности проводилось посредством методики «Оценка готовности педагога к участию в инновационной деятельности» (В.А. Сластенин); опросника «Большая пятерка» (5-PFQ) Р. МакКрае, П. Коста; опросника «Стиль саморегуляции поведения-ССП-98» (В.И. Моросанова); анкеты «Барьеры, препятствующие освоению инноваций» (Т.В. Чиркова). **Результаты**. Результаты показали, что готовность к инновационной деятельности (ИД) проявляют 33% педагогов общеобразовательных учреждений, им свойственны высокие показатели саморегуляции и регуляторных личностных свойств, открытость опыту, экстраверсия и доброжелательность. **Выводы**. Высокий уровень общей саморегуляции является одним из главных условий успешности в освоении и реализации новых видов деятельности, в связи с чем развитие процессов саморегуляции будет способствовать повышению уровня психологической готовности учителя к инновационной деятельности.

Ключевые слова: инновационная активность педагога, осознанная саморегуляция деятельности, барьеры, препятствующие инновационной активности

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Introduction

1.1. Background

Education, like other sectors of the economy, has been undergoing a complex process of permanent modernization over recent decades. According to a number of Russian and foreign scientists, the success of innovations partly depends on the availability and level of professional competencies, as well as the initiative in the continuous self-development of teachers (Naumtseva, 2016; Slastenin & Podymova, 1997; Aldahdouh, Korhonen, & Nokelainen, 2019; Cai & Tang, 2021; Dziallas & Blind, 2019; Stumbrien , Jevsikova, & Kontvain , 2023, etc.). The preparedness of teachers themselves to work in an innovative environment is also extremely important (Gnezdilova, 2006; Gut et al., 2020; Pinto & Costa-Ramalho, 2023).

Scientists from China, studying innovation processes in the education system, noted that the result of such innovations, besides transformations in the educational space, can be changes in the personal characteristics of participants in the educational process, for example, ways of activity, thinking styles, motivation, and worldview (Hughes et al., 2019; Ilic et al., 2024; Pak, Li, & Chung, 2019).

A teacher constantly has to make optimal professional decisions under conditions of multiple uncertainties, which naturally requires continuous self-development, self-knowledge, harmonization of relationships with people, and enrichment of one's own experience (Sahin & Dursun, 2022). This necessitates not only a high level of professional self-regulation of the teacher but also personal self-regulation at the level of human positioning.

1.2. Theory

Aleksey Osnitsky defined self-regulation of behavior as "the positive operational activity of a person, that is, their active, timely, productive regulation of their behavior, which consists of the activities they carry out and the accompanying impulsive and reactive manifestations" (Osnitsky, 2010, p. 111).

A teacher's activity is far from always amenable to algorithmization or preliminary programming and often requires flexible, non-standard solutions, switching from one strategy to another, and searching for new ways of interacting with learners. In modern pedagogy, innovative, more effective means of interaction with learners are often used, which can serve strategic and tactical goals. Both the possibility of multiple uncertainties and their measure of rationality are taken into account — the correspondence of the content and dynamism of actions to emerging situations (Osnitsky, 2010).

Svetlana Panina believes that " today, the teacher's readiness for innovative activity acquires a new meaning, because the content of the teacher's innovative activity is connected with their ability to manage their professional growth" (Panina, 2017, p. 109).

A teacher's readiness for innovation must be considered as their creative attitude towards their activity, the uniqueness of which lies in the necessity of realizing educational goals under conditions of multiple uncertainty.

Readiness for innovative activity, according to the concept of Ludmila Podymova and Ludmila Dolinskaya, is "a special personal state that presupposes the teacher's motivational-value attitude towards professional activity, mastery of effective ways and means of achieving pedagogical goals, and the ability for creativity and reflection" (Podymova & Dolinskaya, 2016, p. 24).

Vitaly Slastenin and Ludmila Podymova were convinced that teachers' ability to organize, control, and regulate their activities

needs to be developed during university studies. They considered readiness for innovative activity as a necessary condition for forming the professional preparation of future teachers. In the structure of readiness, the authors of the concept distinguished four main components: motivational, cognitive, operational, and personal (Slastenin & Podymova, 1997).

Krste Angelowski asserted that "readiness for pedagogical activity is determined by a number of factors, the most important of which is the system of methods and goals, the availability of professional knowledge and skills, the direct inclusion of the personality in the activity, during which the needs, interests, and motives for acquiring significant, most up-to-date knowledge and skills are most actively formed" (Angelovski, 1991, p. 107).

According to Yuri Zinchenko and Inna Volodarskaya, the holistic readiness of a teacher for innovative activity is determined by the personal orientation of pedagogical workers towards an innovative approach to teaching and upbringing (Zinchenko & Volodarskaya, 2007).

Russian researchers identify a number of personal factors indicating teachers' readiness for innovative activity. Among them are "readiness for reasonable risk within their competence, readiness to show initiative when a real opportunity arises, the need for novelty, and the level of teachers' awareness regarding innovative developments" (Panina, 2017, p. 110).

Describing her author's model for the development of innovative activity in a teaching staff, Tatiana Razuvaeva identified a number of key psychological conditions: "the team's orientation towards change, ethical readiness to solve school development tasks, and a positive perception of the conditions of innovative activity" (Razuvaeva, 2014, p. 47).

As numerous domestic studies have shown, the systemic process linking various aspects of the interaction of mental, physiological, and physical processes that ensure human behavior both in organizing the professional activity of a teacher and in readiness for implementing innovations is conscious self-regulation of activity (Osnitsky, 2013).

Oleg Konopkin considers conscious self-regulation of activity as "one of the highest levels of regulation of the activity of biological systems, reflecting the qualitative specifics of the realization of its mental capabilities of displaying and modeling reality, in particular, the reflection of the subject of himself, his activity, activities, actions. The basic principles of self-regulation of activity are subjectivity, awareness, consistency, activity" (Konopkin, 2008, p. 30).

According to Alexey Osnitsky, "self-regulation of activity is carried out by a person as a subject of activity and is aimed at bringing human capabilities in accordance with the requirements of this activity" (Osnitsky, 2013, p. 21).

The process of the formation of activity and its regulation develops during the socialization and personal development of the child, as a result of which there is a transition from naturally conditioned reactive and impulsive forms of behavior to mastering the technology of purposefully organized, projected behavior — that is, activity, as defined by Sergey Rubinstein.

When discussing the readiness for innovative activity of teachers and other specialists in the education system, it is useful to recall the words spoken by Sergey Rubinstein as early as 1922 about the principle of creative self-activity as a principle of human development. Later, Rubinstein defined the specificity of understanding human activity as a projected type of activity, mastered in the process of socialization, carried out in the

unity of consciousness and action using an arsenal of means formed by that time (Rubinstein, 2002).

The unified technology for carrying out transformation and forming new knowledge of new action, mastered by our predecessors, helps us in this: goal-achievement technology. This technology also formed the basis for the formation of self-regulation and, didactically, boiled down to the following: first, one must set a goal; then analyze the conditions, select a method of action or program and appropriate means; then implement this action and evaluate the result obtained; make corrections if necessary. Therefore, it is goals, not needs, that govern our daily behavior in the socially conditioned world. The process of human social functioning is subordinated to solving problems of goal-setting and goal-achievement.

"The principle of creative self-activity," with successful development and socialization involving the mastery of professional work, leads to the formation of an individual style of activity in a person (V.S. Merlin, E.A. Klimov, B.A. Vyatkin), in which the person's existing abilities are used most effectively and insufficiently developed means are compensated for (Osnitsky, 2010).

The discussion of the phenomenology of subjective (i.e., primarily conscious) self-regulation and its role in carrying out activity is conducted both in terms of analyzing its structural and functional properties (Konopkin, 2008; Morosanova, 2004; Osnitsky, 2013) and in terms of personal attributions: the properties that distinguish a person who consciously manages their behavior in professional or amateur activities (Shchukina, 2018).

Both mastery of pedagogical communication and proficiency in didactic methods, features of self-regulation in communication and activity, and readiness for activity in innovative conditions are paramount professionally important abilities of a teacher. But despite all the similar traits of people whose profession is connected with teaching, we also deal with the presence of individual differences, discovered in the teacher's activity and somehow determining the development of their professional abilities (Lokuge S. et al., 2019; Roberts R. et. al., 2021; Stroh, 2021).

In this study, we set the task of assessing the relationship between indicators of the formation of conscious self-regulation and the expression of general personality traits, as well as tracing possible means to help overcome barriers to the manifestation of innovative activity.

Since self-regulation is required by a teacher not only in solving purely pedagogical tasks but also in regulating reactive and impulsive forms of behavior dictated by the social aspects of the teacher's interaction with management, students, and their parents, the research task included studying the teacher's readiness to work in an innovative environment, as well as studying personality traits in which the features of self-management of one's behavior and the formation of mechanisms for conscious self-regulation of professional activity are accumulated and fixed.

Materials and Methods

Study Sample. Teachers of general educational institutions in the Belgorod district (n = 120), including: 77 women, 43 men; average age — 33,2, SD = 3,9; average work experience in school — 4,7, SD = 3,17. The study was conducted at the district methodological association of subject teachers in the sections for history, physics, and mathematics teachers at the Municipal Educational Institution "Severnaya Secondary School No. 1" in the Belgorod district. Participation in the

study was voluntary. Informed consent was obtained from all research participants.

Research Methods. 1) The questionnaire "Assessment of a Teacher's Readiness to Participate in Innovative Activity" by Vitaly Slastenin, used to identify the general level of teachers' readiness for innovative activity and analyze the leading components in the structure of readiness; 2) The adapted five-factor personality questionnaire "Big Five" (5-PFQ) by R. McCrae and P. Costa, allowing measurement of the level of expression of basic personality traits manifested in human behavior across a wide range of situations; 3) The questionnaire "Style of Self-Regulation of Behavior-SSP-98" by V.I. Morosanova, necessary for diagnosing the general level of self-regulation of behavior; 4) The questionnaire "Barriers Preventing the Development of Innovations" by T.V. Chirkova, used to analyze the main barriers to innovative activity and identify innovative potential.

Processing of the obtained data was carried out using the IBM SPSS Statistics-25 program: Student's t-test; Pearson's $\chi 2$; Pearson's correlation coefficient r; multiple regression analysis (MRA). Normality testing was performed using the Kolmogorov-Smirnov test; significance level $p < 0,2$, therefore, the hypothesis of normality of the existing distribution of random variables is not rejected.

Results

We hypothesized that teachers' readiness for innovative activity could be influenced by such psychological prerequisites as high self-regulation of behavior, responsible attitude towards fulfilling one's duties, conscientiousness, and benevolence.

To test the research hypothesis, we first examined the features of teachers' readiness for innovative activity (RIA). It was found that 32% (average age — 32,8, SD = 4,6; average work experience in school — 4,1, SD = 3,8) of teachers exhibit a low level of readiness for educational innovations. A moderate attitude towards changes in the technology of teaching and upbringing of schoolchildren (average level) is shown by 45% of teachers. Only 23% (average age — 30,2, SD = 4,2; average work experience in school — 3,1, SD = 3,5) exhibited a high level of readiness for innovative activity, indicating the presence of an innovative mindset, manifested in openness to perceiving new things, striving for self-development, etc.

Since the "average level" category included subjects with a total readiness score of 55–70, to balance the sample of teachers with low and high levels of readiness, we selected from teachers with an average level a category "with a tendency towards a high level" those who scored 65–69 points. Such teachers constituted 10% of the total sample. As a result, the proportion of teachers with a high level of innovative RIA was 33%.

Separating teachers with high and low levels of RFI from the entire sample, we conducted a comparative analysis of their personality traits using the "Big Five" questionnaire (see Table 1).

According to the data reflected in Table 1, teachers with a low level of readiness for innovation differ statistically significantly ($p \leq 0,05$) from teachers with a high level of readiness in the indicators "openness to experience" (temp = 2,321), "extraversion" (temp = 2,124) and "agreeableness" (temp = 2,251), This characterizes them as more rigid, conservative, passive, and less sociable than teachers with high and medium levels of innovative readiness, who are friendly, socially active, and inquisitive. But both groups of teachers do not differ in terms of consciousness and neuroticism. The increased level of the

Table 1

The expression of the fundamental personality traits of teachers with a high and low level of readiness for innovation

Levels RFI	Personal factors in average scores (SD-standard deviation)				
	Extraversion	Agreebleness	Conscientiousness	Neuroticism	Openness to experience
High M_{x1}	56,7 (2,12)	65,2 (3,15)	52,5 (2,20)	26,4 (2,65)	62,3 (3,21)
low M_{x2}	39,4 (2,34)	48,3 (2,61)	49,7 (2,86)	28,6 (2,19)	37,8 (2,34)
t	2,124*	2,251*	1,536	1,664	2,321*

Note: * — $p \leq 0,05$.

"conscientiousness" indicator, identified in both samples, indicates a tendency towards responsibility, commitment and accuracy in fulfilling one's duties. The low values of the neuroticism scale indicate that both groups of teachers are characterized by self-sufficiency and emotional stability.

Next, we compared the levels of self-regulation of behavior, which, in our opinion, is a predictor of teachers' readiness for innovative activity (see Table 2).

Data in Table 2 demonstrate statistically significant differences between the two samples in the indicator "general level of self-regulation of behavior" (Mx1 = 44, Mx2 = 31 at $p < 0,01$). Teachers with a high level of RFI have a higher level of formed self-regulation of behavior, manifested in independence and awareness in achieving goals, as well as flexibility and adequate response to changing conditions.

Analysis of barriers preventing the development of innovations will allow us not only to identify the innovative potential of teachers with low and high levels of readiness for innovative activity (by T.V. Chirkova) but also to determine which motives (external or internal) dominate in both samples when carrying out innovative activity (Table 3).

At a statistically significant level of $p \leq 0,05$, it was revealed that teachers with a low level, unlike teachers with a high level of readiness for IA, proportionally more often encounter such barriers to innovative activity as: heavy workload (Mx1 = 54%, Mx1 = 63%), lack of material incentives (Mx1 = 54%, Mx1 = 65%), lack of help in mastering innovations within the team (Mx1 = 29%, Mx1 = 64%) and information (Mx1 = 15%, Mx1 = 26%), fear of negative results (Mx1 = 10%, Mx1 = 29%), and the belief that effective teaching can be done in the old way (Mx1 = 12%, Mx1 = 32%). Furthermore, analyzing the overall barrier indicators, we note that teachers with a low level of innovative activity reported significantly more barriers than teachers with a high level, indi-

Table 2

The severity of the level of self-regulation of teachers' behavior with high and low levels of readiness for innovation

Levels RFI	The general level of self-regulation In AS (SD is the standard deviation)
Высокий / High M_{x1}	44 (4,16)
Низкий / low M_{x2}	31 (3,28)
t	2,647**

Note: * — $p \leq 0,05$.

Table 3

Comparative analysis of barriers to innovation among teachers with low and high levels of IA (in %)

Barriers to innovation activity	Levels RFI		χ^2
	igh M_{x1}	ow M_{x2}	
Disagreements, conflicts in the team	5	7	56,9
Lack of help	29	64	102,5*
Little work experience	2	7	63,1
Lack of financial incentives	54	65	92,8*
Feeling fear of negative results	10	29	100,1*
Heavy workload at work	54	63	95,2*
Poor health, other personal reasons	5	3	56,1
The belief that effective teaching can be done in the old way	12	32	99,6*
Poor awareness of innovation in the team	15	26	98,8*

Note: * — $p \leq 0,05$.

cating a low level of their innovative potential.

To confirm our hypothesis and the data obtained from the correlation analysis, we conducted multiple regression analysis to deepen the study of the obtained relationships between the identified RIA indicators, taking into account dependent and independent variables of individual psychological prerequisites (see Table 4).

We attributed RIA indicators to dependent variables, and indicators of psychological prerequisites (self-regulation of behavior, personality traits, barriers preventing the development of innovations) to independent variables, i.e., those determining innovative activity.

In the regression model "Overall RIA Level," statistically significant regression β-coefficients were obtained. Readiness for innovative activity is influenced by the following indicators of psychological prerequisites: "General level of self-regulation of behavior" (r = 0,528, β = 0,703), "Openness to experience" (r = 0,309; β = 0,268), "Agreeableness" (r = 0,347; β = 0,364), "Conscientiousness" (r = 0,398; β = 0,325),

Table 4

Multiple regression and correlation analysis of indicators of psychological prerequisites for teachers' willingness to IA

Indicators of psychological prerequisites	The magnitude of the connection r	The standard coefficient β	t	R-squared
Overall RIA level				
Overall level of self-regulation	0,528**	0,703**	3,462	0,571
Openness to experience	0,309*	0,268*	2,124	0,296
Agreebleness	0,364*	0,347*	1,684	0,397
Conscientiousness	0,398*	0,325*	2,058	0,302
Neuroticism	–0,312*	–0,328*	1,715	0,368
Barriers to innovation (heavy workload)	–0,324*	–0,376*	2,446	0,412

Note: * — $p < 0,05$; ** — $p < 0,01$. The table shows only statistically significant variables.

"Neuroticism" ($r = –0,312$, $\beta = –0,328$), and "Barriers preventing the development of innovations" ($r = –0,324$; $\beta = –0,376$). This result tells us that teachers who can clearly envision the goals of their activities and implement them in short-term and long-term plans, who show persistence and perseverance, possess readiness for long-term organization of efforts to achieve a goal, and who can balance between means and ends depending on unforeseen situations, distinguished by endurance, persistence, and a desire to develop, will be psychologically ready for IA. Due to the ability to generate new ideas, flexibility of thinking, openness to new experiences, and awareness, the likelihood of career growth increases. Teachers with low openness to experience prefer routine to diversity. Agreeable teachers are non-confrontational, willing to share experiences and learn new things. They are inclined to cooperate and ready to build person-oriented interaction with participants in the educational space. Teachers with low agreeableness are conflict-prone and often exhibit cynicism. The obtained positive correlations indicate that the higher the level of self-regulation of behavior of teachers, their openness to new experiences, and readiness to share them, the higher their RIA. Barriers preventing the development of innovations and neuroticism negatively affect RIA.

Discussion of Results

The goal of our study is to study the features of readiness for innovation among teachers of secondary schools in the Belgorod region, as well as to identify the relationship between their level of readiness for innovation and self-regulation of behavior.

As a result, it was revealed that only 23% of teachers exhibit a high level of RIA. Such teachers are receptive to innovations, are in constant search of themselves in implementing innovations, and experience a need to create something new and transform the existing pedagogical reality.

When analyzing personality traits, it was found that teachers with a low level of RIA have reduced indicators of openness to experience, extraversion, and agreeableness, characterizing them as more rigid, conservative, and less sociable than teachers with a high level of readiness for IA. Low values of neuroticism indicators found in both samples indicate that both groups are characterized by self-sufficiency and emotional stability.

In the research of Muhamed Kabardov, indicators of extraversion have repeatedly correlated with indicators of communication ability (Kabardov, 2018). In studies of the formation of regulatory experience in students and teachers by Alexey Osnitsky, the characteristic of agreeableness was considered as an indicator of a tendency towards cooperation (Osnitsky, 2010).

Differences were also found in indicators of the general level of self-regulation, which is the internal purposeful activity of the teacher. Teachers with a high level of readiness for IA have a higher level of formed self-regulation of behavior, manifested in independence and awareness in achieving goals, as well as flexibility and adequate response to changing conditions. According to Alexey Osnitsky, teacher self-regulation is one of the leading psychological determinants of readiness for innovative activity, since self-regulation processes contribute to the successful implementation of innovative activities through forecasting, planning, developing action programs, analyzing their implementation, and subsequent correction and reflection of innovative actions.

During the analysis of barriers preventing innovative activity, both common barriers prevalent among both groups of teachers to approximately the same extent and barriers predominantly characteristic only of teachers with low innovative readiness were identified. Among the common barriers were: heavy workload, lack of material incentives, and lack of help in mastering innovations within the team. These barriers can be attributed to external motives.

Barriers predominantly characteristic of teachers with low readiness include: insufficient awareness of innovative events, the conviction that effective teaching can be done in the old way, and fear of negative results of activities. These indicators can be attributed to internal motives of innovative activity.

The data we obtained are consistent with the results of Elena Frantseva, who also believes that the leading barriers for teachers are "fear of the unknown, when preference is given to the familiar; denial of the need for change and fear of obvious losses (e.g., maintaining the same salary with increased labor costs, lack of resources and time, etc.)" (Frantseva, 2017, p. 104).

Esra Firat and Fatma Torun, analyzing factors of innovative activity, concluded that risk-taking propensity is an important predictor of a high level of innovative readiness in teachers. The authors suggest that the training of future teachers should be planned in such a way that they increase their risk-taking behavior during the learning process (Firat & Torun, 2022).

According to Tatyana Chirkova, the author of the questionnaire, the more innovative barriers a teacher notes, the lower their level of innovative potential. Considering the fact that in the group of teachers with a low level of readiness, the frequency indicators for choosing barriers are significantly higher than in the group with a high level of readiness, it can be said that most teachers with a low level of readiness have a very low innovative potential. This manifests itself in a formal attitude towards work, indifference to changes in their work, which can lead to a decrease in the effectiveness of professional activity and also adversely affect the personal development of students.

The obtained significant regression β-coefficients and correlations give us reason to assert the dependence of psychological readiness for innovative activity of teachers on the level of formed self-regulation of behavior, as well as on the level of agreeableness, emotional stability, conscientiousness, and openness to new experiences.

Conclusion

The results of the study showed the following:

1. Teachers with a low level of RIA are characterized by greater rigidity, conservatism, passivity, and less sociability; teachers with a high level of readiness are more agreeable, socially active, and curious; both groups of teachers do not differ in neuroticism and conscientiousness indicators, meaning both groups are characterized by self-sufficiency, emotional stability, and responsibility.

2. The leading barriers to innovative activity for teachers with a low level of readiness are heavy workload, fear, lack of material incentives, and lack of help in mastering innovations. Their innovative activity is hindered by: insufficient awareness of innovative events, the conviction that effective teaching can be done in the old way, and fear of negative results of activities. Such teachers are indifferent to changes in their work; rare innovations may be used solely in cases of "official necessity."

3. Teachers with a high level of readiness were found to have a higher general level of self-regulation of behavior. Consequently, a high level of readiness for innovation is ensured by higher indicators of the general level of self-regulation.

The initial hypothesis, according to which teachers' readiness for innovative activity can be influenced by such psychological prerequisites as high self-regulation of behavior, responsible attitude towards fulfilling one's duties, conscientiousness, agreeableness, and innovative potential, was confirmed.

Thus, a high level of general self-regulation is one of the leading factors for the successful mastery and implementation of new types of pedagogical activities. Specialists with a low general level of self-regulation exhibit a low level of motivation, a need for the application of external motivation stimuli (material reward, assignment of a higher qualification level, satisfactory working conditions, external positive evaluation from others, relaxation of requirements, control, etc.), psychological relief, and changes in thinking and lifestyle.

In conclusion, it should be noted that the activity of mastering and implementing innovations is not easy for many teachers. Established activity habits, concerns about new working conditions, uncertainty about the benefits for oneself and the necessity of innovations, and much else form negative motivation towards change. The teacher's innovative activity and its effectiveness will largely be determined by whether they understand the personal, professional, and social meaning of applying these innovations, and undertake their search and choice.

This study fills the gap in fundamental research on the problem of professional socialization of teachers under conditions of permanent transformation, in particular the activity of teachers in advanced educational systems, and provides grounds for asserting the need for a critical rethinking of the criteria base for evaluating the process and results of teacher preparation.

Limitations. We recognize that this study has a number of limitations. The study focuses exclusively on teachers of the Belgorod region, which may not reflect the situation in other regions or countries. The cultural context can influence psychological readiness for innovative activity. Also, the analysis of prerequisites and barriers to innovative activity was carried out on a sample size of 120 people. In future studies, it may be possible to involve teachers from other cities to increase the validity and reliability of the results. Despite these limitations, this study may be one of the first to examine the prerequisites and barriers to innovative activity among educators. This makes a new contribution to our understanding of the need to develop the professional socialization of a teacher in the context of transformation and rethinking of the criteria base for evaluating the process and results of teacher training, including readiness for continuing education.

Abbreviations

The following abbreviations are used in this manuscript:

IA innovative activity

RIA readiness for innovative activity

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Conflict of Interest

The authors declare no conflict of interest.

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Авторы заявляют об отсутствии конфликта интересов.

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