

READINESS FOR PROFESSIONAL AND PEDAGOGICAL SELF-DEVELOPMENT: RESULTS DYNAMICS AMONG STUDENTS OF MASTER'S PROGRAMS IN PEDAGOGY

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Abstract

Purpose of the study: The purpose of this study is to determine the dynamics of readiness for professional self-development among students of pedagogical Master's programs during their training. It is due to the fact that professional self-development is considered as one of the goals of preparing a pedagogical magistracy graduate for subsequent pedagogical activity.

Methodology: As an empirical method, the authors used the diagnosis of partial readiness for professional and pedagogical self-development. It represents a self-assessment map of readiness for self-education activities. This technique allows to conduct a self-assessment of self-development skills formation according to the following components: motivational, cognitive, moral-volitional, gnostic, organizational, communicative, and the ability to self-government. A special feature of this diagnostic technique is the inverse correlation between a number of respondent's self-assessment points and his/her readiness for professional self-development. The data obtained were processed using methods of mathematical statistics. Significance of differences was evaluated by Student's t-test ($P \geq 0.95$).

Results: The study indicates that the readiness for professional self-development among students of pedagogical Master's programs increases during training. These changes occur in the motivational, moral-volitional and intellectual spheres of the graduate students and depend on the presence of teaching experience and teacher education.

Applications of this study: The dynamics of students' readiness for professional and pedagogical self-development can be taken into account when updating educational Master's programs in pedagogy. Programs improvement can be done on the basis of expanding the possibilities of learning process individualization and identifying optimal conditions for the educational environment which ensure the formation of students' attitudes toward constant self-development.

Novelty/Originality of this study: The scientific novelty of this research lies in establishing the correlation between professional self-development of students during their obtaining pedagogical Master's programs and presence/absence of their teaching experience.

Keywords: *Pedagogical Master's programs, Students, Professional self-development, Readiness for professional self-development.*

INTRODUCTION

The system of higher pedagogical education is focused on solving problems connected with teacher training, demanding them to become competent and capable of continuous professional growth (Chigonga & Mutodi, 2019; Sunzuma & Maharaj, 2019; da Costa, 2020; Valente, 2020; Sánchez-Jiménez, 2020). The Methodology of Mathematics and the Emergence of a Proto-Discipline. *Pedagogical Research*, 5(3), em0064. <https://doi.org/10.29333/pr/8201>. A graduate of a pedagogical education program, while dealing with various professional problems, has to demonstrate continuous self-development (Gvarliani, Vidishcheva & Rassolov, 2015; Bayanova et al., 2019; Chudina, 2018; Piralova et al., 2020).

Being oriented on self-development is significant not only for a student, but also for a graduate student, a future teacher, and is an important factor in his professional and pedagogical formation. We consider professional formation and development of a student, a future teacher, in accordance with the synergetic approach (Zeer, 2006), as a process of a personality change under the influence of educational environment, personal activity; as a process aimed at self-improvement.

Self-education, self-development of a student are indicators of his subject position (Khairutdinov, 2019), both during training and in professional self-realization. Self-development can be considered as a goal of continuous

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teacher education (Sergeev & Serikov, 2013). Self-development of a student, pre-service teacher, contributes to achievement of professional competence in subsequent activities (Revyakina, 2010). According to V.V. Serikov (2014)⁵, the ability to self-development acts as a key competence of a teacher (Serikov, 2014). In addition, professional self-development expands the boundaries of professional competency under the influence professional aspirations, significant for a person, and external requirements (Esterle, 2016).

A personality demonstrates needs and readiness for self-development and self-realization; the need to place it at the center of the educational process is confirmed by such factors as a socio-cultural situation in a society (Prokofieva et al., 2018; Avdeev et al., 2019), and the modern education paradigm and its methodological foundations (Batechko, 2014). At the same time, readiness is seen as a manifestation of individual personality traits and their integrity, which determine the nature of an effective individual with high performance (Esterle, 2016). Readiness for professional and pedagogical development is an internal condition for increasing professional and pedagogical culture. Formation of students' capability and readiness to constantly improve their professional level is one of the tasks of professional development in higher education.

Professional self-development is closely connected with personal self-development. The process of self-development is based on the need for self-change and personal growth; it is carried out by the practice aimed at achieving personally and professionally significant goals (Garanina, 2016). Professional and pedagogical self-development is based on increasing the level of creative activity, independence, mobility in the conditions of mastering professional competencies demanded by the society (Zhgenti et al., 2018; Khairullina et al., 2020).

It is professional and pedagogical self-development that is the main source of the quality of educational activity. Teacher's professional formation and development in implementation of pedagogical activity is traditionally paid attention. Thus, self-directed reflection and collaboration are considered as ways of forming professional growth (Beatty, 2000), confidence is analyzed as a component of teacher's professional development (Valazza, 2000), attention is also drawn to teacher training in planning (Huang, 2015).

Strict requirements are especially issued to a graduate of pedagogical Master's programs regarding his readiness to organize his own professional development. Modern educational programs of higher education have the potential to develop professionally important personal qualities in students that are necessary for subsequent successful implementation of professional activities. Conditions for professional and pedagogical development of students are created in a system of higher pedagogical education during their preparation for further pedagogical activity. Optimal conditions for professional self-development of students, among others, include: a learning orientated internship approach (Cord & Clements, 2010), influence of academic courses (Carpenter & Hyde, 1994), Personal Development Planning (PDP) as a method of recording achievements (Kumar, 2008).

At the same time, the problem of professional development and self-development of Master students, future teachers, remains relevant in connection with the search for options to optimize educational environment and taking into account personalized experience. However, this aspect is not sufficiently taken into account during the period of receiving Master's degree, although among students there are a large number of those who have already gained experience in teaching after completing bachelor's or specialty program. In

our opinion, when studying for Master's degree, it is necessary to monitor the process of professional and personal formation by determining the readiness of students for self-development. This involves the analysis of changes in various components of professional activity (motivation, ability to independently organize own activity, communicative competence, level of moral-volitional qualities, etc.) (Kiseleva & Soloviev, 2017). In this regard, the purpose of this study is to determine the dynamics of readiness for professional self-development among students of pedagogical Master's programs during training. This will allow to subsequently update pedagogical Master's programs on the basis of expanding the possibilities of individualization of the learning process.

RESEARCH METHODOLOGY

In the current research there were applied theoretical methods, including analysis of the research subject on the basis of philosophical, psychological and pedagogical literature study, and also empirical methods - questionnaires.

The empirical study (2018-2019) involved students of the pedagogical Master's program of Kazan Federal University, studying educational program "Pedagogy of Higher Education" and "Pedagogy of Professional Education". A survey was conducted among 30 Master students during the first and second years of study (in October 2018 and December 2019 respectively). A longitudinal study detects changes in professional and pedagogical self-development of students during their training. The total sample included both students who entered Master's program straight after getting Bachelor's or specialist's degree (without time gaps), and also students who had already gained teaching experience after completing Bachelor's or specialist's program. In our study, the number of such students is half of all participants.

As an empirical method, we used the diagnosis of partial readiness for professional and pedagogical self-development (Fetiskin, Kozlov, & Manuilov, 2002). It represents a self-assessment map of readiness for self-education activities. This technique allows you to conduct a self-assessment of self-development skills formation according to the following components: motivational, cognitive, moral-volitional, gnostic, organizational, communicative, and the ability to self-government. A special feature of this diagnostic technique is the inverse correlation between a number of respondent's self-assessment points and his/her readiness for professional self-development. The data obtained were processed using methods of mathematical statistics. Significance of differences was evaluated by Student's t-test ($P \geq 0.95$).

RESULTS

At the initial assessment of readiness for self-education (October 2018), it was determined that the students score the following components with the lowest number of points: cognitive (II) and organizational (V) (Table 1). Considering the inverse correlation between a number of respondents' points and the level of their readiness for professional self-development, the results mean that students have a high level of the mentioned components. In other words during completing the Master's program they demonstrate a high willingness to increase the level of pedagogical, psychological, methodological and specific knowledge and skills (subcomponents of the cognitive component). Master's students also strive to master various methods of pedagogical activity, develop skills in planning and restructuring the system of activity (organizational component).

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Table 1. Components of students' partial readiness for professional and pedagogical self-development (% of the total points)

	I	II	III	IV	V	VI	VII
2018	79,4	67,4	85,6	76,4	69,7	82,7	82,8
2019	74,1	74,7	79,3	73	69,1	75,4	76,2

Comments on components:

I - Motivational, II - Cognitive, III - Moral-volitional, IV - Gnostic, V - Organizational, VI - Ability to self-government, VII - Communicative.

We observed that first-year students have a higher number of points (and, consequently, a lower level) in evaluating the following components: motivational (I), moral-volitional (III), ability to self-government (VI) and communicative (VII) components; it should be noted that the mentioned components are of great importance for presenting readiness for self-education activity (Table 1).

When studying the dynamics of partial readiness for professional self-development of students of pedagogical Master's programs, there were observed opposite trends. A significant increase in readiness was noted in students' self-assessment of components: moral-volitional (III) and ability to self-government (VI) (Fig. 1). At the same time, students are gaining more points for cognitive component (II), which indicates a decrease in willingness to improve the knowledge and skills necessary in pedagogical activity (Fig. 1). No significant differences were found for the remaining components.

Figure 1. Dynamics in students' partial readiness for professional and pedagogical self-development training (2018-2019); I-VII - components of professional and pedagogical self-development: I - motivational, II - cognitive, III - moral-volitional, IV - gnostic, V - organizational, VI -

ability to self-government, VII - communicative; * - significant differences ($P \geq 0.95$).

When assessing the components of readiness for self-education activities of students belonging to different categories (with teaching experience and without it), changes were found that did not completely coincide with the results presented in Fig. 1. So, students with teaching experience, when obtaining pedagogical Master's program, show increase in readiness for professional self-development due to components: motivational, moral-volitional and ability to self-government (Fig. 2, left). In a group of students without pedagogical experience, similar changes were not found. At the same time, a decrease in readiness for self-education activity in the cognitive component is shown (Fig. 2, right). During the study, it was determined which subcomponents determine significant changes in the above-mentioned components (Fig. 3). It was established that the increase in readiness for the moral-volitional component is associated with the following subcomponents: positive attitude of students to a learning process (1), determination (4), will (5), ability to work (6), and tendency to get the job done (7) (Fig. 3, A).

Diligence (5), being an integral part of the ability to self-government in pedagogical activity, also affects the increase of readiness for professional self-development (Fig. 3, B). Opposite changes in the cognitive component are caused by an increase in the level of pedagogical knowledge and skills of students (based on the results of self-assessment) (Fig. 3, C), which they acquire when obtaining the educational program.

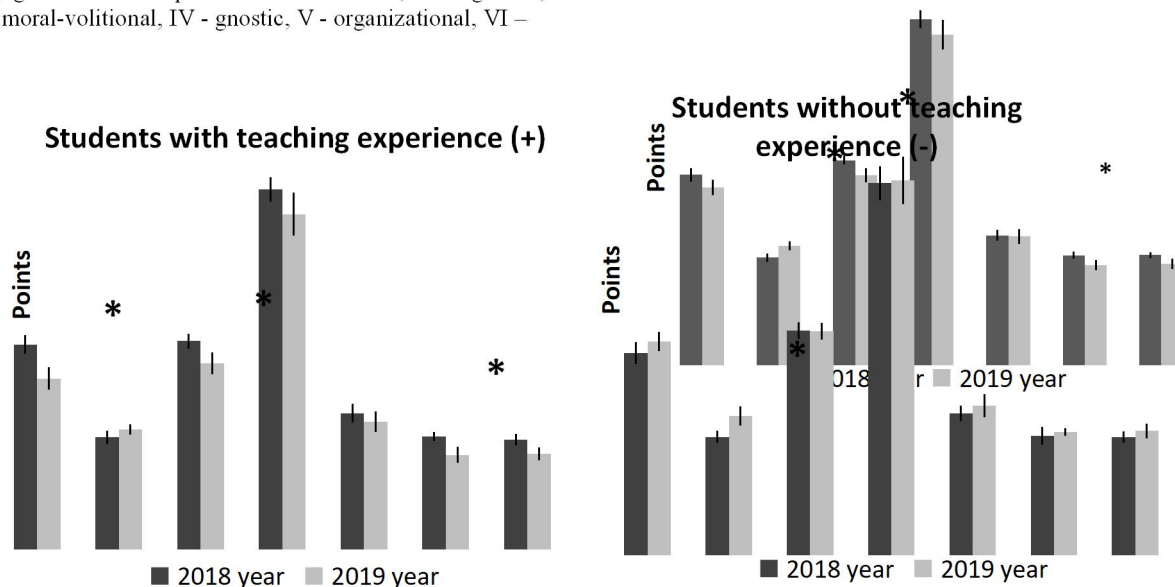


Figure 2. Self-assessment of components of professional and pedagogical self-development by students of pedagogical Master's program with and without teaching experience (I-VII components designations are the same as in Figure 1); * - significant differences ($P \geq 0.95$).

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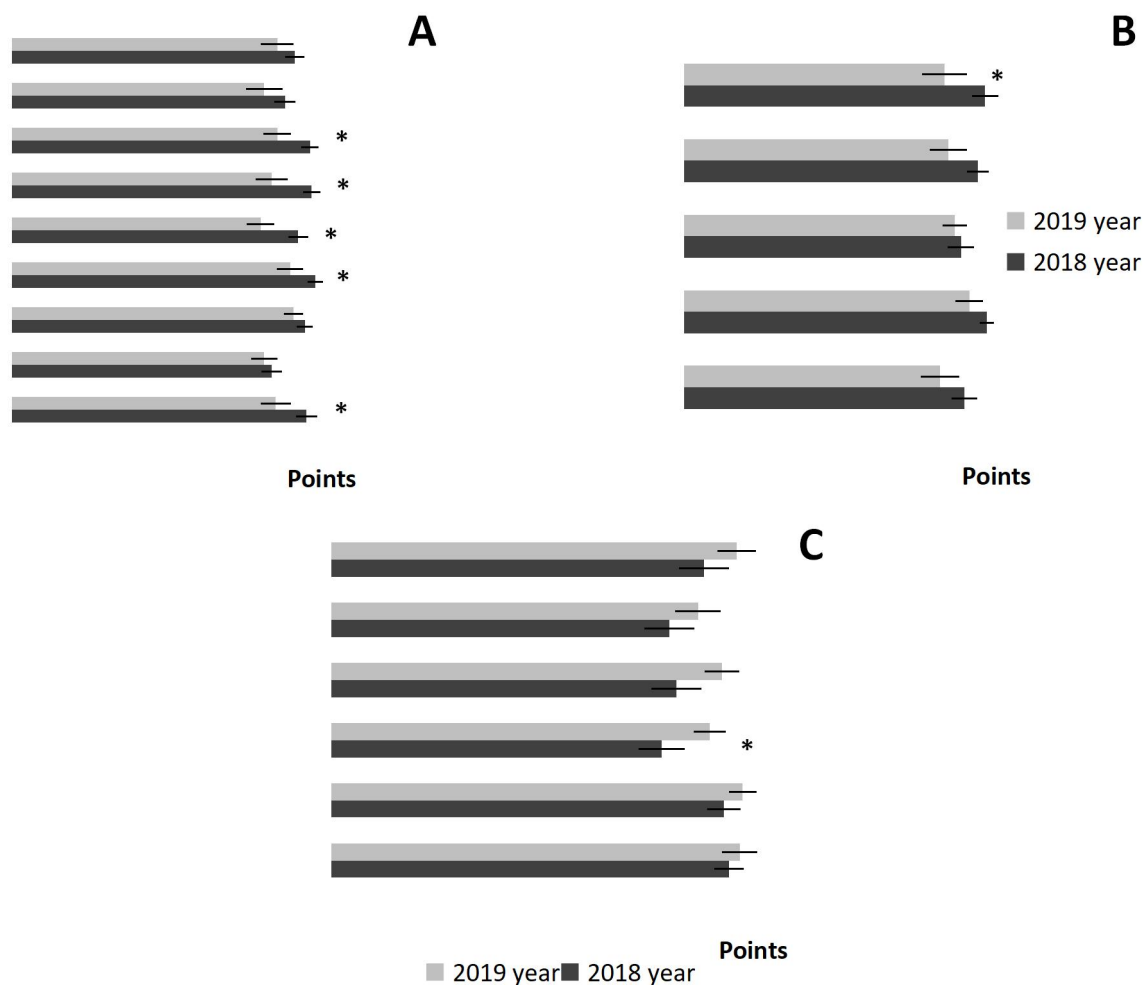


Figure 3. Dynamics in subcomponents of moral-volitional (A), ability to self-government (B), cognitive (C) components of students readiness for professional and pedagogical self-development; * - significant differences ($P \geq 0.95$).

Comments on subcomponents:

A: 1 - positive attitude to a learning process, 2 – critical thinking, 3 - independence, 4 - determination, 5 - will, 6 - ability to work, 7 - tendency to get the job done, 8 - courage, 9 - self-criticism;

B: 1 - independence of own activity, 2 - ability to self-analysis and reflection, 3 - ability to self-organize and mobilize, 4 - self-control, 5 - hard work and diligence;

C: 1 - general educational knowledge, 2 - general educational skills, 3 - pedagogical knowledge and skills, 4 - psychological

knowledge and skills, 5 - methodical knowledge and skills, 6 - specific knowledge.

It should be noted that students of the second year of study give higher points to their pedagogical and psychological knowledge and skills, in case they have not received a pedagogical education before (Table 2). This increase is 128% of the initial level for pedagogical knowledge and skills (first year of study), and 127% of the initial level for psychological knowledge and skills.

Table 2. Students' self-assessment of subcomponents of the cognitive component on readiness for self-education activity (in points)

	Year	1	2	3	4	5	6
Students without teaching experience	2018	6,58±0,31	6,75±0,30	5,33±0,60	5,92±0,61	5,25±0,72	5,67±0,70
	2019	7,11±0,31	7,00±0,33	6,33±0,41	6,78±0,49	6,22±0,70	6,44±0,50
Students without education in teaching	2018	6,50±0,36	6,43±0,42	4,93±0,54	5,29±0,62	5,29±0,55	6,00±0,53
	2019	7,20±0,42	7,20±0,25	6,30±0,45*	6,70±0,45*	5,90±0,69	7,10±0,57

Comments on subcomponents:

1 - general educational knowledge, 2 - general educational skills, 3 - pedagogical knowledge and skills, 4 - psychological knowledge and skills, 5 - methodical knowledge and skills, 6 - specific knowledge; * - significant differences ($P \geq 0.95$).

The lack of teaching experience among students is not a decisive factor for the dynamics of readiness for self-education activity in terms of the cognitive component (Table 2), because there were no significant differences in students' self-assessment between the first and second year of study.

DISCUSSION

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We considered the readiness for professional self-development of students of pedagogical Master's programs as a personality trait, which consists of several components. For two years, during the educational program implementation, we carried out the analysis of these components. It was established that students of the first year have a high readiness for professional and pedagogical self-development, which is determined, first of all, by the level of development of cognitive and organizational components.

Our results indicate that there are multidirectional changes in the components of students' readiness for self-education activity during two years of study (Fig. 1 and 2). They foremost depend on absence/presence of students' experience in teaching, acquired after completing Bachelor's or specialist's program. Students with teaching experience show a higher readiness for professional and pedagogical self-development in the second year of study due to the need to increase their determination, diligence and ability to work, improve the ability to get the job done, which is associated with moral-volitional aspirations and the ability to self-government. This is consistent with the opinion of V.I. Revyakina (2010), who notes that the process of self-development accompany changes not only in motivational and emotional, but also in volitional, intellectual spheres, and in the "Self" processes.

At the same time, during the two-year study at the Master's program, students develop psychological and pedagogical knowledge and skills, which determines a decrease in readiness for further self-education activities by students without pedagogical experience (Fig. 2 and 3). Among these respondents there are students who have and have not previously received pedagogical education. After a more detailed examination of the dynamics of the cognitive component of readiness for professional and pedagogical self-development, it was found that a decrease in readiness occurs precisely in students without teaching experience after completing Bachelor's or specialist's program. In the second year of study, these students higher evaluate their psychological and pedagogical knowledge and skills. It can be noted that during training, individual restructuring of professional self-determination and motivational sphere takes place, which, in particular, affects multidirectional changes in readiness for professional and pedagogical self-development in different categories of students. This statement coincides, in our opinion, with the point of view that professional and personal development and self-development of a teacher cannot be considered a linear and gradual process (Batechko, 2014).

The study results allow us to assume that teaching experience is the reason for the more intensive professional self-development of students during obtaining pedagogical Master's programs. It should also be taken into account that the ratio of person's readiness for professional and pedagogical development and real involvement in professional self-development do not necessarily correspond to each other (Esterle, 2016). Clarification of this aspect can be carried out in the continuation of our study.

CONCLUSION

Based on our analysis of the basic components and procedural characteristics of the readiness of Master's students for professional and pedagogical self-development, it is concluded that it increases during two-year training. These changes occur in the moral-volitional, motivational and intellectual spheres of an individual and depend on student's teaching experience. A higher self-assessment of the level of psychological and pedagogical knowledge and skills in the second year of study reduces the readiness for self-education activities by students without pedagogical

education. The assumption is made that during training the intensity of professional self-development of students of pedagogical Master's programs is determined by the presence of teaching experience.

The results of the study can be taken into account when developing and updating pedagogical Master's programs, which advance students' pedagogical abilities, increase their readiness for pedagogical self-development, and expand the possibilities of individual approach to education.

LIMITATION AND STUDY FORWARD

This study was conducted only on students of pedagogical Master's programs of Russian universities. While this research can be done globally to confirm the presented motivational, moral-volitional and intellectual spheres on other samples for more general results.

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AUTHORS CONTRIBUTION

The authors affirmed that there is no conflict of interest in this article. Elena V. Asafova refined the write-up in methodology and analysis, carried out statistical analysis procedures, interpretation of the results, Oksana V. Vashetina carried out fieldwork and wrote the manuscript.

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