

# Readiness for the Profession of Students With Different Psychotypes in a Digital Educational Environment

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**Abstract.** In this article, the authors examined the readiness for the profession of students with different psychotypes studying in a pedagogical direction in a digital educational environment. The purpose of this study is to study the readiness for the profession of students with different psychotypes, studying in a pedagogical direction in a digital educational environment. The article deals with the classification of personality psychotypes. The main theoretical approaches to the concept of readiness for the future profession of students are analyzed. Studied the readiness for the profession of students with different psychotypes in the digital educational environment. The study involved 60 respondents - students of the pedagogical direction of the Southern Federal University. The research methods were psychodiagnostic techniques and methods of mathematical statistics. The data obtained as a result of the research will help to select a new or change the existing toolkit for working with students in the process of forming their professional competencies and skills, as well as make adjustments to the content and methods of providing the main and additional educational material in the framework of the digitalization of the educational sphere of activity.

## 1 Introduction

The relevance of studying the readiness for a profession of students with different psychotypes in a digital educational environment is to study and identify the level of readiness for a future profession among students of a pedagogical direction in a digital educational environment. The active introduction of the digital environment into the field of education leads to new trends in the development and formation of students' readiness for a profession. The purpose of the study is to study the readiness for the profession of students with different psychotypes studying at the pedagogical faculty in a digital educational environment, which will help to select a new or change the existing toolkit for working with students in the process of developing their professional competencies and skills, as well as to make adjustments to the content and ways of providing basic and additional educational material in the framework of digitalization of the educational sphere of activity.

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The theoretical component of our research was made by the fundamental works of the following authors: A. Baumert, M. Schmitt, M. Perugini [1], M.E. Hernández-Hernández, J.M. la Roca Chiapas, L. F. García y Barragán [2], C.G. Jung, K.A. Abulkhanova-Slavskaya, V.A. Bodrov and others, describing personality traits and various psychotypes. The issue of readiness for the profession of students in the context of the specifics of the age of students as the identification of the essence, stages and important factors of the process of preparation for the profession of an individual in their works was revealed by J. Ridgway, J. Nicholson, S. McCusker [3], A.-K. Schindler, T. Seidel, R. Boheim, M. Knogler, M. Weil, M. Alles, A. Gröschner [4], I. Rots, A. Aeltermann, P. Vlerick, K. Vermeulen [5] V.P. Zinchenko, E.A. Klimov and others. The study of readiness for a profession in the context of determining abilities, interests, motives and psychotypes is disclosed in the works of such authors as: J.M. Wicherts, H.C. Vorst [6], E.E. Rogova, I.A. Pankratova, S.V. Zholudeva, A.M. Sheveleva, M.V. Naumenko, N.E. Skrynnik, I.N. Ulybysheva [7], B. G. Ananiev, A. G. Asmolov, A. V. Zeer and others. Digitalization of the educational environment is considered in the works of F. Reimers, C. Chung [8], G. Secundo, G. MELE, P. Del Vecchio, G. Elia, A. Margherita, V. Ndou [9] and others.

The question of the readiness of students for the upcoming profession is one of the main in the process of learning and the formation of certain competencies, especially in the era of active use of digital technologies, which in the future directly affects psychological health, quality of work and many other factors. In recent years, there has been a tendency to study the personal factors of readiness for a profession, ensuring professional development. E. Nikolaeva, S. Kotova [10] in their work, the basis of the state of readiness is the specific personality traits of students, which are a system that includes such elements as: motivation, intellect, emotions, psychological personality type and will. According to the authors, the personal qualities and characteristics of students are directly related to their further education and professional development in the field of activity chosen by a person. At the same time, studying the problem of readiness for the future profession of students with different psychotypes, special attention is paid to the integrity of the personality.

Y. Limani, E. Hajrizi, L. Stapleton, M. Retkoceri [11] in their work demonstrate an analysis of the readiness of higher educational institutions to digitalize the educational process, where they note that the transition to digital technologies leads to new trends in learning, as well as to more enhanced interaction between the teacher and students, which in a new way can be reflected not only in the learning process, but also in the formation of the level of readiness for the profession among students.

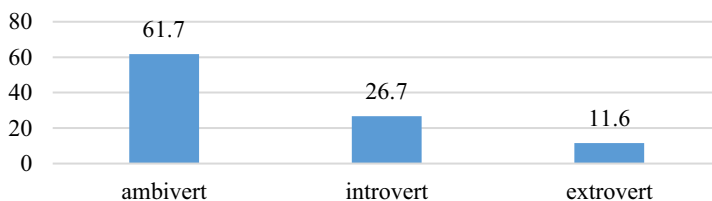
Expanding the boundaries of the digital educational environment is considered controversial in our time. On the one hand, the transition to teaching with the help of new technologies can improve the productivity of both the teacher and the student. The use of new technologies in teaching improves skills and cognitive characteristics [12,13]. At the same time, a significant negative factor is the influence of critical perception of distance learning on psychological health and internal experiences [14]. There is a decrease in the propensity to take part in online activities, which also entails a decrease in academic performance [15]. Therefore, it is especially important to study the readiness for the profession of students with different psychotypes of the psychological and pedagogical direction in the era of digitalization, since with full awareness of the existing level of readiness for students to work, it is possible to form the necessary learning style, on which the success of information assimilation will depend, as well as the formation of professional competencies and skills.

## 2 Materials and methods

To solve the set tasks were used: theoretical analysis and generalization of scientific data. To identify the typological characteristics of the personality of undergraduate students, a questionnaire was used: "Questionnaire for identifying typological characteristics of a personality" (K. Jung); to analyze the level of awareness of one's readiness for the chosen type of professional activity - "Activating vocational guidance technique" (N. Pryazhnikov). To process the results obtained, we used the r-Spearman correlation analysis and the Kruskal-Wallis H-test. The study involved students of the pedagogical direction of the Academy of Physical Culture and Sports of the Southern Federal University of Rostov-on-Don. A total of 60 students, aged 18 to 20, took part.

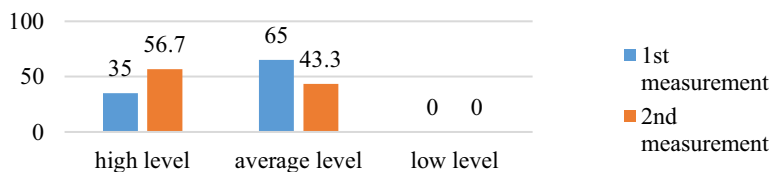
## 3 Results

The results obtained in the course of the questionnaire to identify the typological characteristics of the personality showed that 61.7% were ambiverts, 26.7% were introverts, and the least extroverts were identified - 11.6% of students. A graphic representation of the percentage ratio of psychotypes of students of the pedagogical direction is shown in Fig.1.



**Fig.1.** Identified psychotypes of students.

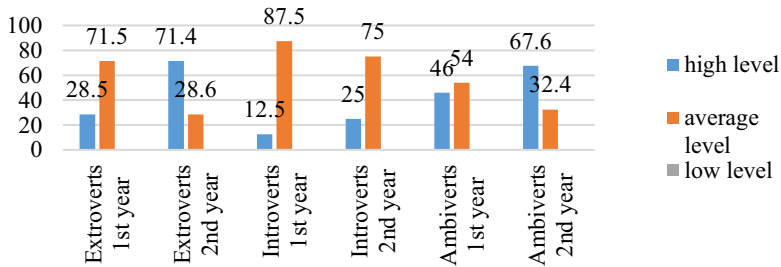
To analyze the level of awareness of one's readiness for the chosen type of professional activity, two measurements were made: in the 1st year of the undergraduate degree and in the 2nd year of the undergraduate degree with the same students. In the 1st year, the results showed that a high level of readiness for the profession of students was detected in 35%, an average level of readiness - in 65%, a low level of readiness was not revealed at all. By psychotypes, extroverts and introverts generally have an average level of readiness for a profession: among extroverts, 28.5% have a high level, an average level - 71.5%, introverts have a high level of readiness for a profession is 12.5%, and an average level is 87.5%. In the situation with ambiverts, we can note the result with a small difference in favor of the average level of readiness, which is possessed by 54%, and high - 46%. A graphic representation of the percentage ratio of the characteristics of the level of readiness for the profession of students of the pedagogical direction of the 1st and 2nd year is shown in Fig. 2.



**Fig.2.** Features of the level of readiness for the profession of students in the 1st and 2nd year.

Compared to the 1st measurement taken in the 1st year, the 2nd measurement, which was made in the 2nd year, showed that the level of readiness for the profession increased.

According to the results, 56.7% were found to have a high level of readiness for the profession, 43.3% - an average level, and a low level of readiness was also not revealed at all. According to psychotypes, the level of readiness for a profession has noticeably increased among extroverts: among extroverts, 71.4% have a high level, an average level - 28.6%, among ambiverts a high level of readiness for a profession is 67.6%, and an average level is 32.4%. In the situation with introverts, it can be noted that the level also increased among some students, but in general, the average level of readiness still prevails, making up 75% of the respondents, and a high one - 25%. A graphical representation of the percentage ratio of the characteristics of the level of readiness for the profession of students of the pedagogical direction with different psychotypes of the 1st and 2nd year is shown in Fig. 3.



**Fig. 3.** Features of the level of readiness for the profession of students with different psychotypes in the 1st and 2nd year.

To identify the relationship between the level of readiness for the profession and the psychotypes of students in the pedagogical direction, the Spearman correlation coefficient was used. At the level of statistical significance of 0.05 and 0.01, a reliable correlation was established between the level of readiness for a profession of students and various psychotypes in the 2nd dimension, which indicates that the greater the level of readiness for a profession, the greater the relationship with psychotypes of students ( $r = 0.223$ ,  $p = 0.039$ ). To identify differences in the levels of readiness for a profession between psychotypes of students, the Kruskal-Wallis H-test was used. In the 1st measurement, there were no statistically significant differences in the level of readiness for a profession between students' psychotypes. In the second measurement, statistically significant differences were revealed at a significant level: the level of readiness for a profession increased more among extroverts than among other psychotypes, among introverts it decreased more than among others, among ambiverts the level of readiness for a profession decreased slightly ( $H = 5.335$ ,  $p = 0.049$ ).

## 4 Discussions

The percentage of students' psychotypes is typical for respondents in the pedagogical direction, since their profession is associated with a refined ability to communicate, build trusting relationships and be able to find solutions in difficult situations. Students are still at the stage of choosing a profession in their field of study, therefore, the prevailing psychotype will help determine which profession may be more relevant for them: teacher, psychologist-educator, psychologist or other related work.

Analysis and interpretation of readiness for a profession in general among 1st year students showed an insufficiently formed awareness and orientation in their future activities and also in their life choices. Since in the first years of study at the university there is a period of adaptation, and they are at the initial stage of the formation of their professional development, questions may arise about the correct choice, change of place of study,

relevance and future prospects in the chosen activity, as well as the ways and possibilities of its implementation. The second measurement, implemented in the 2nd year, showed that, in general, the majority of students already have fairly clear life prospects, they have formed a certain idea in relation to the professional and labor environment and ways of its further self-realization, and a vision and awareness of the situation in labor market of their field of activity.

The data obtained in the course of statistical analysis demonstrate that ambiverts in the 1st measurement have a higher level of readiness for a future profession than extroverts and introverts. They contain the traits of both personality types and this gives them the opportunity to adapt to any circumstances, including the digital educational environment, as well as to perfectly understand those around them, choosing the appropriate model of behavior. In the second measurement, the extroverts showed the highest level of readiness, awareness and understanding for the profession. Due to their psychological characteristics and focus on social interconnection in the learning process, the level of readiness for their future professional activities increases. Among ambiverts, the level of readiness for the profession slightly decreased, which may be due to the fact that in some ambiverts, who combine personality types of both extroverts and introverts, the psychotype of the introvert predominates, and as was demonstrated earlier, few introverts have a high level of readiness, which is confirmed by and the results of the 2nd measurement - the level of readiness compared to the 1st measurement has significantly decreased, the reason may be that they are aimed at the world of their own experiences, have little contact, are silent, make new acquaintances with difficulty, do not like to speak and be in public, have a high level of anxiety and are difficult to adapt to changes, including the active use of digital technologies in the educational environment at the present time.

## 5 Conclusions

Thus, the readiness for the future profession of pedagogical students in the digital educational environment is interconnected with psychotypes. During the training process, changes in readiness levels were traced depending on the psychotypes of the respondents. The more a student is open to new opportunities and trends, demonstrates his skills and acquired knowledge, the more his readiness for such professions as a psychologist, educational psychologist or trainer in the era of digitalization increases. It is very important not to become self-contained, having chosen the pedagogical direction of training for more fruitful learning and obtaining important competencies, since in the future professional activity will be based on constant interaction with people both in the online sphere and in personal communication.

In order to increase the readiness for the future profession of students of the pedagogical direction, it is worth taking into account the peculiarities of their psychotypes. In this regard, it is necessary to select a new or change the existing toolkit for working with students in the process of forming their professional competencies and skills, as well as make adjustments to the content and methods of providing the main and additional educational material in the framework of the digitalization of the educational sphere of activity. The digital educational environment provides many new resources that can make learning for all students with different psychotypes accessible, and the level of awareness, understanding and readiness for future professional activity is higher.

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