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Original Article
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Graded Characteristics of Emotional Empathy of Future Teachers

Abstract

Introduction. The study examines the features of emotional empathy in future teachers' professional development, addressing the need to significantly update content and ensure quality of professional training with focus on international standards, high teaching profession status, and modernized teacher education. The research recognizes professional development as a long-term process with targeted competence content at different levels and stages of pedagogical activity. **Methodology and Methods.** The study was conducted using a sample of 3rd and 4th year undergraduate students from Akhmet Yassawi International Kazakh-Turkish University and Peoples' Friendship University named after Academician A. Kuatbekov. The research employed systematic assessment of professionally significant personal qualities, focusing on emotional and social empathy levels, with correlation analysis examining relationships between different empathy channels. **Results.** The main feature of future teachers' professional training was identified as systematic work on assessing and improving levels of professionally significant personal qualities, particularly emotional and social empathy. The study revealed that the relationship of the intuitive channel of empathy is connected to identification and the emotional channel of empathy. A negative correlation was found between emotional and empathic abilities, providing insights into the complex nature of empathic development in future educators. **Scientific novelty.** The research contributes to understanding the specific features of emotional empathy development in future teachers' professional preparation, establishing the relationship between different empathy channels and identifying previously unknown negative correlations between emotional and empathic abilities in pedagogical education contexts. **Practical significance.** The findings provide evidence-based approaches for improving teacher education programs by incorporating systematic assessment and development of emotional empathy, offering practical tools for enhancing professionally significant personal qualities and ensuring quality professional training aligned with international standards.

Keywords: emotional empathy, graduation, empathic attitudes, future teachers, personal qualities, professional qualities, professional development.

Introduction. Awareness of the importance that a professionally significant property of a future teacher is the presence of empathy or emotional sensitivity symbolizes it's self-worth and uniqueness. The categorical status of the phenomenon of «emotional empathy» is determined by the ability to consistently demonstrate an understanding of a person's inner world in speech and action in order to predict and adequately influence their behavior. Emotional empathy as a unique tool of the psychological and pedagogical process enables the future teacher to continuously form

value meanings and the ability to interpret professional experience in a reflective form. Emotional empathy motivates future teachers to self-development, personal and professional growth, and the search for fresh resources in their pedagogical and emotional development. An empathic teacher is a person with developed skills to feel and sympathize, communicate and predict the emotional states of their students, aimed at improving emotional well-being. As is known, the fundamental feature of the professional training of a future teacher is the systematic work on assessing and improving

the levels of professionally significant personal qualities.

The formation of a teacher as a professional is associated with the development of various spheres of personality – intellectual (professional thinking, professional knowledge and methods of activity; I.F. Isaev, S.G. Kosaretsky), operational-activity (practical readiness, professional experience, skill; I.A. Zyazyun, V.A. Slastenin), emotional-volitional (emotional state, volitional self-regulation; L.M. Mitina, I.A. Zimnaya), spiritual and moral (value orientations, reflexive culture (L.F. Obukhova, V.A. Tolochev), professional and personal qualities (V.V. Ignatova, N.V. Kuzmina); development of professional self-awareness (I.V. Vachkov). The main philosophy of vocational training is to encourage students to engage in useful learning, which significantly improves the quality of emotional empathy (Holt & Kysilka, 2016; Kornell & Bjork, 2017). The vector of the developing subject, according to Obsuth I., Murray A. L., & Malti T (2016), should be the values of a multicultural educational environment for the professional training of a future specialist. In the context of the stated purpose of this article, it is necessary to consider the psychological and pedagogical essence of the phenomenon of «Emotional empathy».

In the scientific literature, there is a clear understanding of emotional empathy as:

1. The ability of an individual to respond emotionally to the experiences of another - a phenomenon that is characterized by: emotional penetration, empathy with the interlocutor, the establishment of emotional identification, the expression of empathy, sympathy and complicity (K.D. Ushinsky, P.F. Kapterev, V.A. Sukhomlinsky).

2. The process of non-evaluative empathy of one with the real and actual experiences of the other while observing the empathic condition «as if» in the process of awareness of one's experiences by the empathized (S.B. Borisenko, T.P. Gavrilova, G.F. Mikhalechenko).

3. Professionally significant personality quality, considered in the following aspects of pedagogical activity (understanding,

acceptance, recognition of personality (I.M. Yusupov, O.I. Tsvetkova, T.V. Romanova).

Kazakhstani scientists and practitioners: a mechanism for introducing a personalized learning environment, the key role of which is assigned to the personal development of future teachers; a set of educational tools and applications created taking into account the needs and capabilities of students; a personalized learning profile that actualizes the creation of adaptive systems that provide them with support and resources for self-development (O. Tapalova & N. Zhienbayeva, 2022); the design of an educational environment that focuses on the condition of adapting learning to the preferences and needs of future teachers, including expanded access to 21st-century working skills and the creation of pedagogical communities that promote support, which positively affects the personal and professional development of future teachers (U. Abdigapbarova & N. Zhienbayeva, 2021).

Despite the fact that there is a huge amount of research on certain aspects of the problem under consideration, in our opinion, there are no studies that reveal the specifics of personal and professional development, formation and growth of future teachers.

In the process of professional development, the future teacher, a priori, has legitimate questions:

- what is the optimal and productive level of emotional empathy for teaching?
- how well-developed is emotional empathy among functioning teachers in reality?
- is it critical to develop emotional empathy?

Scientific interest in the study of the influence of emotional empathy development on the process of professional development of teachers is reflected in the research of foreign scientists, who have become classics in this field:

1. In the study «Transforming Pedagogy Using Mobile Web 2.0», Cochrane, T., Flitta, I., & Bateman, R. (2009) demonstrate the effectiveness of the web platform 2.0, which radically changes the didactics of teachers' professional development.

2. Damianidou E. & Phlataka H. A. (2016) reveal the process aimed at the algorithm of

professional development of a teacher through the process of developing empathy as a phenomenon of psychological origin, which is of great importance for professional activity.

3. Scientific research by Warren C. (2013) in the field of «Technology Integration», they focus on the experimental effect of emotional empathy on the professional development of teachers.

4. Alnuaim, A., Caleb-Solly, P., & Perry, C. (2009) examined the impact of innovative technologies on professional competencies, psychological and pedagogical conditions of professional development of future teachers; the formation of determinants of professional development (psychological factor, psychological condition, mechanism and form of manifestation).

5. In the study «Motivation for increasing creativity, innovation and entrepreneurship», Barroso-Tanoira, F. G. (2017) reveals the innovativeness of a teacher's motivational and emotional development and offers practical results and methodological recommendations.

The results of a theoretical analysis of research (R.A. Valeeva & I.R. Gafurov, 2017) devoted to the study of conceptual approaches to the process of professional development of a teacher have shown that the humanistic, based on emotional empathy of a teacher as a universal characteristic of a personality is a complexly organized system that includes the ability to realize one's potential (competencies, experience, personal qualities) demonstrated in practice.) for professional growth, awareness of its social significance and responsibility, the need for its continuous improvement. For the organization of the applied aspect of research in this regard, the most significant were the works of domestic scientists: the duality of professional and personal positions is shown through the mechanisms of reflection and emotional empathy (G.J. Lekerova, O.S. Sangilbaev, M.A. Perlenbetov); the scientific potential of the teacher as a professionally important personal resource with a multicomponent structure.

Based on the above, it can be stated that in the system of professional development of a future teacher as a technological process of

entering his profession, during which qualitative personality transformations occur, leading to the development and change of personal and professional qualities, to the formation of a positive attitude towards the profession, the methodological basis for modeling the professional development of subjects of the educational process in the context of formation of professionally significant and personal qualities and how, the consequence is not properly reflected in Kazakhstani pedagogical research.

Most of the existing concepts describe the most important aspects of professional development.

1. The developing concept of professional development as an integral process by Mitina L.M. (1998), embodying the unity of personal and professional development, the object of which is the integral characteristics of personality: orientation, competence, emotional and behavioral flexibility. According to the author's definition, «the essence of a person's professional development is the process of formation, development and realization in pedagogical activity of professionally significant personal qualities and abilities, professional knowledge and skills, qualitative transformation by a person of his inner world, leading to a fundamentally new structure and method».

2. The acmeological concept of professional development of a personality (Derkach A.A., 2006) is defined as an integral psychological characteristic reflecting the level and nature of mastering a profession at the level of high standards established in professional activity.

3. The concept of professional development as a dynamic, multilevel process of personality development from the initial manifestations of the formation of professional intentions to the full realization of oneself in professional activity by T. Kudryavtseva (1986).

4. The concept of professional development as a consistent solution to a set of professional development tasks that a subject sets for himself on the basis of knowledge and acceptance of the social situation of professional development, taking into account his life and professional goals of Yu. P. Povarenkov (2002).

5. The concept of formation of a creative professional N.V. Kharina (2013), I.I. Burlakova (2013), G.S. Korytova (2014). The authors understand the professional development of a personality as the process of professionalization, the results of which can be considered the formation of a professional, the development of new professionally important qualities, the transition of a personality to the level of professionalism.

6. Psychological determinants of the success of professional development of G.N. Skudarev's (2008) personality. The researcher highlights the implementation of targeted programs that ensure:

- the integrity and sustainability of the educational space, the integration and breadth of interaction of its subjects;
- the development of positive motivation; the need to consider empathy not as an isolated phenomenon, but in direct connection with a number of professionally significant qualities of a future teacher;
- the development of a system of professionally significant qualities occurring in the process of teacher training;
- the development of experience, self-analysis of the formation of professionally significant qualities and awareness of the place of emotional empathy in the structure of the individual style of pedagogical activity.

7. Psychological determinants that increase the effectiveness of professional self-determination depending on the course (year) of study according to M.G. Ugarova (2006). The effectiveness of students' professional self-determination is determined in the first year of study by positive academic motivation, the need for professional development, and in the second year by the development of professional pedagogical orientation and approval from significant individuals. The stability of professional development and awareness of the social significance of teaching are crucial for third-year students. In the fourth year, it is important to focus on professional realization, personal development, and the manifestation of creative abilities. Finally, for graduate students of a pedagogical university, orientation towards

social professions is most significant in terms of professional self-determination.

8. I.Yu. Antipina's (2007) concept of professional development is a high degree of development of a number of important professional and personal qualities (competence, professionalism, leadership, sociability, empathy, tolerance, communication culture, organizational skills, self-criticism, fairness, the ability to work in extreme situations, the desire for self-improvement, non-conflict, emotional stability, mastery of public speaking). Thus, the formation of external ways of expressing emotional empathy triggers a process of personal change for future teachers, which results in an internal acceptance of the function of empathic communication. At the same time, it is essential to actualize the development of a teacher's high professional empathy based on an empathic approach, which involves: the use of a diagnostic component in pedagogical activity that ensures personal cognition, taking into account knowledge of psychological and pedagogical sciences; reflection of stable integral personality traits; identification of causes and motives; understanding actions based on knowledge about personality; the ability to positively and controllably influence further development.

In addition, training focused on professional development has improved the traditional format of education, focused especially on the profession of a teacher. In student-centered learning, students can be viewed from the perspective of «creators», whereas the role of a university teacher is to determine the awareness of their choice of profession (Partanen, 2020), which implies the importance of forming their professional intentions. At the same time, it is noted (Gustavsson, 2016) that traditional approaches are little focused on the development of critical thinking. It should be noted that when mastering the system of professional competencies, socially significant and professionally important qualities are formed. The process of professional training is seen as an active process in which students are active creators of feelings, striving to gain consistent and organized knowledge».

In educational activities focused on developing the ability to introspect, the ability to notice, distinguish and label affective states, the ability to separate one's own emotional states from the experiences of others, the management of these states, the availability of resources to help others - all these factors are very important for the development of empathy, although they

are extremely energy-consuming both mentally and physically (Degago, Adinew Tadesse, Luckson Muganyizi Kaino, 2016).

Materials and Methods. A number of psychological tests were used to diagnose the current state of compliance with the criteria under study:

Table 1. *Diagnostic tools for assessing indicators of empathic abilities and social empathy*

The task of experimental research	Diagnostic tools for assessing empathy indicators
Identification of the levels of formation of empathic abilities and emotional empathy.	1. Assessment of I.M. Yusupov's emotional empathy; 2. A. Mehrabyan's emotional response scale adapted by N. Epstein; 3. Empathy test by V.V. Boyko; 4. N.P. Fetiskin's emotional empathy index.

The content of the criterion apparatus, which included component-by-component diagnostics, assessment and characterization of future teachers. The *empathy component* was assessed through anonymous online testing. The online testing was compiled on the basis of the following psychodiagnostic complex:

- the methodology «Diagnostics of I.M. Yusupov's emotional empathy level», which is aimed at identifying the psychological features of students' empathic development;

- A. Mehrabyan's emotional response scale methodology, modified by N. Epstein, which allows analyzing students' empathic tendencies: the level of emotional feedback abilities; the ability to experience;

- the method of diagnosing the level of empathic abilities (empathy test) by V.V. Boyko is used by us to assess the ability to empathize and try to mentally understand another;

- N.P. Fetiskin's method of diagnosing emotional empathy, which allowed us to determine the empathy index.

Results and Discussion. Experimental research base: Akhmet Yassawi International Kazakh-Turkish University and Peoples' Friendship University named after Academician A. Khatbekov.

Research sample: 3rd and 4th year undergraduate students, the total number of respondents is 200 people. The choice of 3rd year students as an experimental group is not

accidental, and is explained by the fact that this period coincides with the formative stage of the future teacher's professional training and is the most favorable period for the purposeful formation of its components, including professional and personal qualities. As part of the experiment, at the stage of diagnosis of the initial level of empathy, the respondents' empathic abilities and levels of emotional empathy were revealed using psychodiagnostic methods. A number of psychological tests were used to diagnose the current state of compliance with the criteria under study. According to the first component, the state of the initial level of the empathy component, the results of the experiment made it possible to identify the levels (low, medium, high) of the development of emotional empathy among students.

We were able to identify the leading channel of empathy (rational, emotional, intuitive, attitudes that promote empathy, the penetrating ability to empathize, identification in empathy). The analysis made it possible to identify three levels of empathy among students. For the 3rd year students, the levels were high (20%), medium (68%) and low (12%). The 4th year students showed high (28%), medium (62%) and low (10%) empathy scores. The high level of empathy indicated that the students showed plasticity, emotional responsiveness, sympathy and empathy for children. The presence of a low level of empathy indicated introversion,

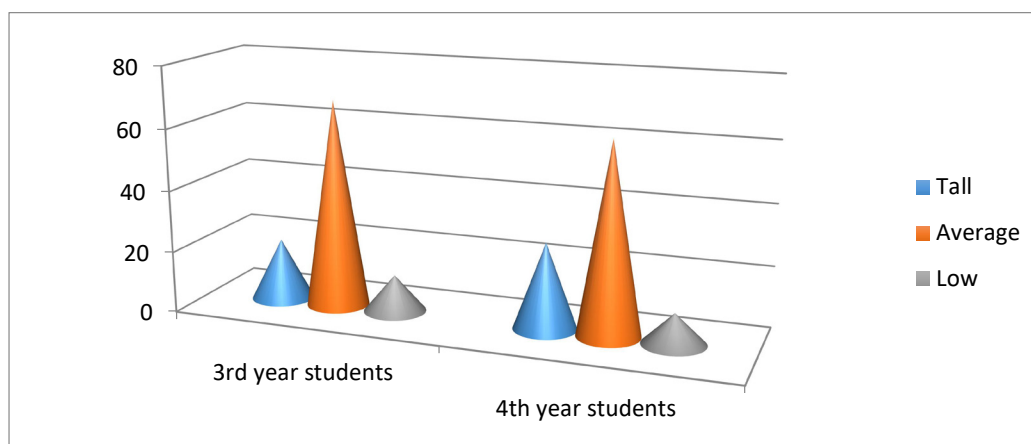


Figure 1: Average indicators of the empathy component in 3rd and 4th year students

rigidity, and selfishness. A larger number of 3rd and 4th year students turned out to be at an average level of empathy, which demonstrates that the mechanism of social perception of a future teacher is not sufficiently developed. We also found that future teachers had a high level of empathy characterized by the empathic abilities of such attitudes that promote empathy (3.52) and identification in empathy (3.45 out of 6 points).

The experimental results obtained at a high level indicate the predominance of the

strengths of students with an extended range of responsiveness and empathy. The low level of empathy revealed in the students testified to the ability to empathize in the form of a channel of penetrating ability - 2.9 points; the intuitive channel also showed 2.9 points. It is quite possible that such low rates can be explained by a lack of teaching experience. The average level of emotional empathy indicates students' interpersonal relationships and their judgments based solely on actions, subjecting everything to self-control.

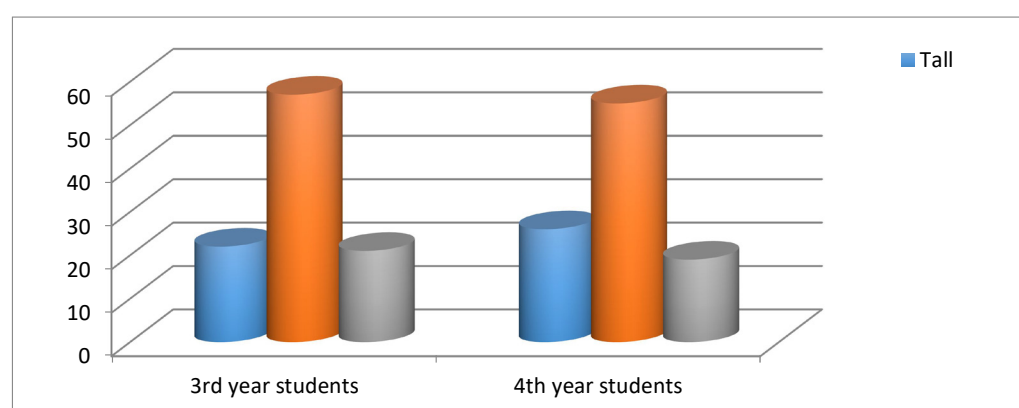


Figure 2: Indicators of the diagnosis of emotional empathy of students according to the method of A. Mehrabyan modified by N. Epstein

The levels of emotional empathy show a tendency towards low and medium levels (50%), which is not expressed by the ability of future teachers to «penetrate» into the world of other people's feelings. Identification is the ability to empathize, to be able to put oneself

in the place of another, which is based on the lightness and plasticity of emotions, the ability to feel the mood of another. The rational channel of empathy determines the focus of the future teacher's attention and thinking on understanding the student's behavior. Figure 2

shows the results of the diagnosis of empathy according to the method of A. Mehrabyan. Most students also have an average level, which indicates an insufficiently developed empathy, whereas this phenomenon is a professionally significant personal quality for a future teacher.

Empathy is a phenomenon of psychological and pedagogical origin that arises in pedagogical activity between a teacher and a student, therefore, in its absence, the pedagogical process will be depersonalized.

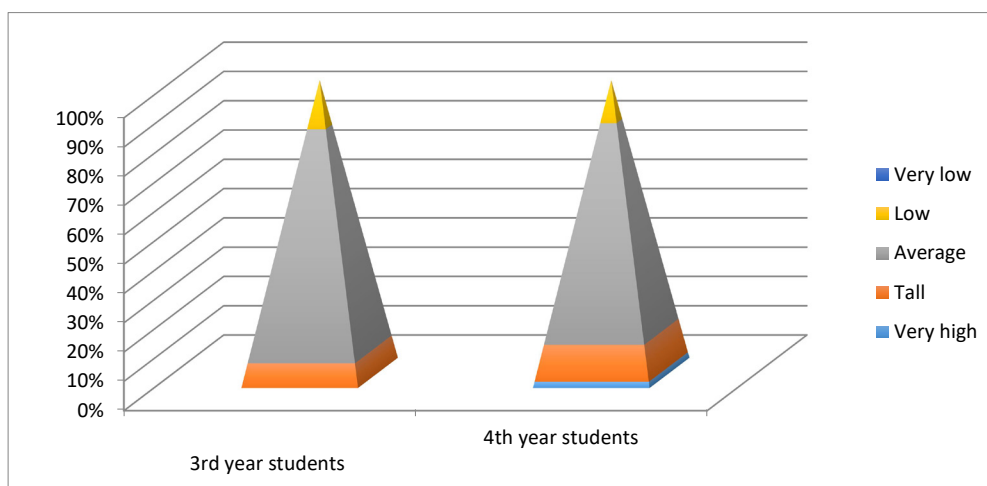


Figure 3: Shows the results obtained by the method of diagnosing emotional empathy in 3rd and 4th year students

Future teachers who have shown a high and very high level (4th year) of emotional empathy are emotionally responsive, sociable, and able to find compromises. But there are minor drawbacks to representatives of a very high level – they desire constant emotional and social approval, they are easily upset, as they do not like painstaking work, which is unacceptable

in the pedagogical process. There is also a very low level among 3rd and 4th year students, which indicates that students who study in this specialty do not have problems with being the first to start a conversation, and try to find contacts with people. Figure 4 shows the results of the emotional empathy shown by the future teacher, its main components.

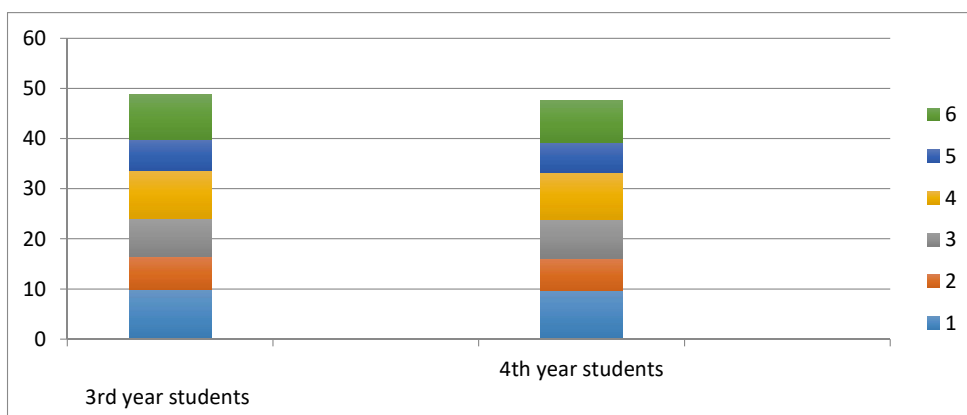


Figure 4: Average values of emotional empathy among 3rd and 4th year students

Thus, the study of emotional empathy indicates an average level of empathy among students, they are not very sensitive, they

subject everything to self-control, they are too delicate. Students who have shown a low level of empathic abilities and emotional empathy are

more rational, they need to work on showing sensitivity, understanding and responsiveness, as their absence complicates the establishment of interpersonal contacts and the desire to retire more often. Such students need psychological training to teach them to «open up» to children, to be attentive to the behavior of loved ones and children. Figure 5 shows the results of

V.V. Boyko's method of identifying emotional abilities, where the numbers indicate the scales of the questionnaire: 1 – rational channel of empathy; 2 – emotional channel of empathy; 3 – intuitive channel of empathy; 4 – attitudes that promote empathy; 5 – penetrating ability to empathize; 6 – identification in empathy.

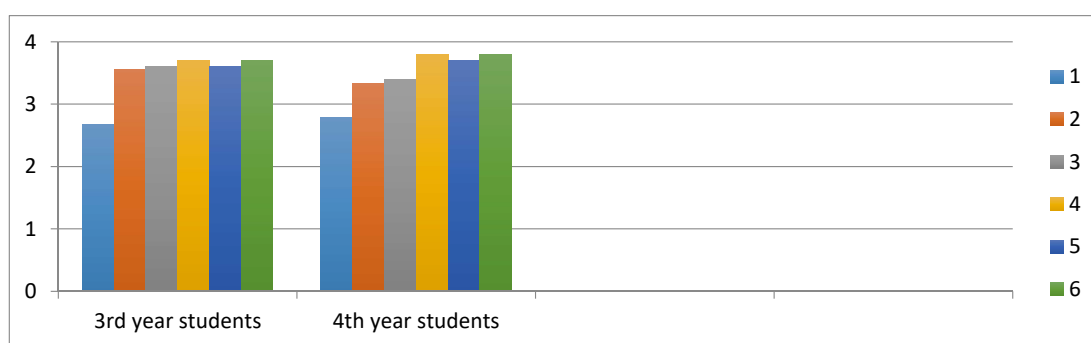


Figure 5: The results of the assessment of the initial state of readiness of future teachers: the empathic component

Correlation analysis provided significant strong links (statistical significance $p \leq 0,01$) between social empathy and empathic attitudes. The relationship of the intuitive channel of empathy is related to identification and the emotional channel of empathy. A negative correlation has been found between emotional and empathic abilities. Thus, evaluating the emotional-empathic component, we can say that students' empathy is in the process of developing, and it would be logical and timely to conduct an experiment to develop the emotional-empathic component. It should be noted the importance of including elective courses in educational programs, which consider pedagogical forms and methods of interaction between subjects of the educational process for the development of two-way empathy. Such forms usually include problem-based learning, the inclusion of educational technologies, role-playing games, discussions, and trainings.

Conclusion. The results of the study clearly demonstrate the importance of the formation of emotional empathy in the process of

professional development of future teachers. It has been experimentally established that undergraduate students of the Akhmet Yassawi International Kazakh-Turkish University and the Peoples' Friendship University named after Academician A. Kuatbekov are characterized by a high level of empathy and empathic abilities as a professional competence. They are characterized by the willingness and ability to understand and adequately assess both their own emotional state and the emotional state of others. The high level of empathy of future teachers was characterized by the empathic abilities of such attitudes that promote empathy, and identification in empathy. The subjects showed an obvious desire to be empathic even with an average/low level of emotional intelligence. The average level of emotional empathy and empathic ability is justified by us as a positive, expected result of the study. This fact is confirmed by correlation analysis, which presents significant strong links between emotional empathy and empathic attitudes.

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