

Lera Akhtyamovna Kamalova, PhD, Irina Vladimirovna Novgorodtseva, PhD

# Mechanisms for the Formation of Empathic Culture of Students

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**KLJUČNE BESEDE:** empatija, empatična kultura, študent, učitelj, pedagoška univerza, medicinska univerza

**POVZETEK** – Avtorici v svoji raziskavi poročata o posledicah nezadostne metodološke razvitosti mehanizmov in metod za oblikovanje empatije med študenti pedagoških in medicinskih univerz, ki je pomembna poklicna kompetenca bodočih učiteljev in zdravnikov. Empatična kultura učiteljev in zdravnikov je sestavni del osebne kulture, sestavni del poklicne spretnosti, ki zahteva namensko oblikovanje in razvoj. Namen študije je teoretično utemeljiti in eksperimentalno preizkusiti mehanizme oblikovanja empatične kulture pri študentih pedagoških in medicinskih univerz. Glavna raziskovalna metoda temelji na izbrani diagnostiki. Pri poklicih zdravnik in učitelj smo dokazali, da je empatija pomembna poklicna kvaliteta. Večina študentov pedagoških in medicinskih univerz je pokazala povprečno raven empatične kulture. Pri učiteljih so bolj razviti čustveni dejavniki in dejavnostni kanali empatije, pri zdravstvenih delavcih pa kognitivni dejavniki. Rezultati študije se lahko uporabljajo pri strokovnem usposabljanju študentov pedagoških in medicinskih univerz.

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**KEYWORDS:** empathy, empathic culture, student, teacher, pedagogical university, medical university

**ABSTRACT** – The relevance of this study is caused by the insufficient methodological development of the mechanisms and methods for empathy formation in students of pedagogical and medical universities, which is an important professional competence of future teachers and doctors. The empathic culture of teachers and doctors is an integral part of personal culture, a component of professional skills that requires targeted training and development. The aim of the study is to theoretically justify and experimentally test the mechanisms of empathic culture formation in students of pedagogical and medical universities. The main research method is based on the selected diagnostics. We have proved that empathy is an important professional trait in the profession of doctors and teachers. Most students of pedagogical and medical universities showed an average level of empathic culture. The emotional and active channels of empathy are more prominent in teachers, and the cognitive channels are more prominent in physicians. The results of the study can be used in the professional training of students of pedagogical and medical universities.

## 1 Introduction

In the process of professional training of future teachers and doctors, it is especially important to develop an empathic culture as a basic professional quality for a modern specialist (Lepičnik-Vodopivec, 2003). Communication plays a crucial role in pedagogical practice as it is a fundamental component of successful pedagogical practice that enables a more engaging, collaborative, and fulfilling learning experience for everyone involved (Klopčič et al., 2016). In addition, empathic communication involves both accepting and allowing different perspectives and emotions in others and sharing them with them to provide encouragement and support. Teachers, doctors and other healthcare workers do activities in the person-to-person system, where they try to liken themselves to another person to “understand” another person’s experiences and feelings

and assume the position of a communication partner (Šimec et al., 2022). The problem is that much emphasis is placed on the acquisition of clinical skills and abilities in the education of medical students, while it is necessary to develop empathy in medical students. A doctor's empathy is expressed in the ability to feel empathy and understand the patient's emotional state, to sympathise with him/her. A person's empathy results from the double contradiction between their own experiences and the perceived experiences of another person.

The Professional Standard of a Teacher states that a teacher of primary general education must be able to communicate with children, recognise their dignity, understand and accept them; be able to analyse the actual situation in the classroom; be able to protect the dignity and interests of students; be ready to communicate as the most important adult in the social situation of the development of a primary school child in conditions where children's trust in the teacher grows (Professional Standard of a Teacher, 2013).

Pedagogical activity is associated with high emotional load of the teacher. The most important moral quality of a teacher, which contributes to the formation of his/her professional communicative competence, is empathy in relationships with people (Hmelak and Rudaš, 2020). Empathy contributes to the balance of interpersonal relations, moral growth of the person and effective mutual understanding in communication with children. In conditions of lack of "warmth" in interpersonal relations, strong negative changes in socio-economic structure, people face the problem of loneliness and indifference. In this context, the problem of empathy as the ability to sympathise and empathise becomes relevant in the context of teacher training (Dolgova and Melnik, 2014).

The empathic culture of a teacher is an integrative quality, manifested in the ability to emotionally respond to the feelings of students, to build relationships with them and taking into account their inner attitudes. Empathy is an indicator of professional success of a teacher and a doctor. In this context, it seems relevant to study the mechanisms of empathy formation as a professionally important quality. The problem of empathy has been included as a scientific problem in the circle of general problems of personality formation. Without its understanding, it is difficult to carry out a productive analysis of the mechanisms and basic characteristics of a person's mental and moral development. Several foreign authors such as Jung (1996), Lipps (1907), Rogers (1994), and Kohut (2000) have studied empathy in its various forms. Jung (1996) saw the essence of empathy in the projection of subjective content: "Since the essence of empathy consists in the projection of subjective contents, the unconscious act preceding it must have the opposite character, namely, the redemption of the object's effectiveness. Self-activity fills this object to a certain extent and thus adapts to the perception of subjective empathic content". Lipps (1907) presented the content of empathy as the self-objectification in an object different from Me, whether the objectified name of the feeling deserves it or not. According to Rogers (1994), the teacher must possess the following abilities: the desire for maximum flexibility; the ability to empathise, sensitivity to the needs of school children; the ability to give a personal coloring to the process of education and training; the attitude of creating positive reinforcements for children's self-perception; the possession of a style of simple, informal, warm communication with children; emotional balance, self-confidence, cheerfulness.

Kohut (2000) considered empathy a universal need for development. The infant's experience of empathic "mirroring" of the caregiver is a necessary component of the

development of a connected self, and conversely, traumatic failures to provide empathic “mirroring” play a critical causal role in the development of defects and pathology of the self. Zhou et al. (2021) conducted a systematic review of approaches to teaching and assessing empathy in medicine and concluded that empathy is one of the core competencies medical workers can use to provide successful patient- and relationship-centred care. A high level of empathy is essential for the development of professionalism in students in training for medical professions. Other researchers (Krishnasamy et al., 2019) have conducted research on how medical student, patient and teacher perceptions affect empathy, how education influences empathy and how compassion is expressed in medical students. The results of the authors’ research include important decisions for health care educators and health care curriculum developers. Yu et al. (2022) studied empathy in students, teachers, doctors and physicians and identified 3 factors for empathy stability. High stability factors form the basis for individual empathy behaviour. Low stability factors are those that are highly situation dependent. Medium stability factors are those that are persistent in the environment and can influence empathy levels in the long term. Researchers Sobczak and Popowicz (2019) compared the levels and scales of empathy of individuals studying according to different educational strategies: students of medical specialties, nursing, obstetrics, physical therapy, psychology, pedagogy and sociology. Scientists have noticed a serious decrease in the level of empathy among medical students. Empathy declines in students after the third year of study, regardless of the type of university.

Other researchers – Kanchan et al. (2018) – believe that the medical profession has been challenged due to declining quality of healthcare services. This decline is attributed to the weakening of human values and the lack of empathy and communication skills among physicians. Researcher Geoffrey (2017) found that the medical profession has adopted a cognitive model of empathy or detached concern in its professionalism and practice. Currently, there is a gap in physician empathy, as evidenced by poor patient care in the United Kingdom. Medical students may also develop empathy deficits during their studies. Based on a study of the level of empathic communication among students, a group of researchers (Lermen et al., 2022) concluded that empathy is an important component of personal characteristics, as is the ability to manage emotions, which affect the quality of communication between them and patients.

Nemov (1999) suggests several classifications of the empathy types:

- emotional empathy;
- cognitive empathy;
- predicative empathy;
- aesthetic empathy;
- egocentric empathy; 6) humanistic empathy.

Zakharova et al. (2019) study empathy as the basis of doctor-patient communication and consider the development of empathic behaviour in future teachers and doctors. The analysis of views of Russian and foreign scientists reflecting the essence of the concept of “medical empathy” is given. Empathy is the core of interpersonal relations based on effective professional communication between medical professionals and patients. Shkitina et al. (2014) reveal the features of pedagogical empathy. They believe that empathy in a teacher’s professional activity is not so much a tool as the main

strategy of the teacher's activity. For a teacher, empathy is a more complex quality that implies the organisation of a certain educational influence. The result will not always be a productive communication between the teacher and the student, since the educational process can go its own way and get out of control due to serious influences caused by various random factors. The personal qualities of a teacher are inseparable from professional competencies. Podlasy (2004) refers to scientific enthusiasm, love for one's professional work, erudition, mastery of the subject and teaching methods, mastery of the technologies of pedagogical work, organisational skills and abilities, pedagogical tact, mastery of communication technologies, oratory skills, and spiritual sensitivity as these professional competencies. Studying the professional component of the teacher's psychological and pedagogical competence, Sinyagina and Derkach (1998) found that the teacher's empathy, together with reflection, flexibility, sociability, and the ability to cooperate, stimulates a state of emotional well-being, intellectual activity, creative search, and promotes mutual understanding in relations with the student.

Thus, the analysis of psychological and pedagogical literature shows the interest of researchers in empathy and allows us to define empathy as a personality trait expressed in sympathy, compassion, engagement, based on genetically determined abilities of projection and emotional response to another person.

## **2 Materials and methods**

The *aim* of the study is to theoretically justify and experimentally test the levels of formation of an empathic culture in students of pedagogical and medical universities.

Research objectives:

- To determine the most effective methods for the formation of empathy among students majoring in education and medicine;
- Experimentally test the level of empathy formation among students of pedagogical and medical universities;
- Development of a special course on the formation of empathy among students at a pedagogical university.

Various methods were used to test the hypothesis, complementing each other: observation, summative and formative pedagogical assessment, questioning, testing, analysis of the results of experimental work.

Within the framework of the studies, the authors used quantitative research methods, an anonymous survey of 65 first-year students majoring in General Medicine of the Faculty of General Medicine of the Kirov State Medical University; 60 first-year students of the training programme "Primary education and foreign (English) language" of the Institute of Psychology and Education of Kazan Federal University.

We chose the following diagnostic method for the study:

- The method of diagnosis of communicative control by Schneider (Fetiskin et al., 2002);
- Assessment programme of non-verbal communication by Kuznetsova (Fetiskin et al., 2002);

- Methodology “Balanced Emotional Empathy Scale” by Mehrabian and Epstein (Fetiskin et al., 2002).

Schneider’s communicative control diagnostic method aims to determine the level of communicative control. Participants are required to read 10 statements reflecting reactions to specific communication situations and rate each statement as true (t) or untrue (u) in relation to themselves by placing the appropriate letter next to each item. 1 point will be awarded for the answering “t” to questions No. 1, 5 and 7 and for answering “u” to all other questions. The total score is calculated as follows: 0–3 points correspond to low communicative control; 4–6 points correspond to average communicative control; 7–10 points correspond to high communicative control.

In the assessment programme of non-verbal communication of Kuznetsova, test takers must answer 20 questions. There are 4 answer options: A – always; B – often; C – rarely; D – never. Each question has four possible answers, and each possibility is assigned a certain number of points from one to four (A – 4 points; B – 3 points; C – 2 points; D – 1 point). This technique makes it possible to diagnose three parameters of non-verbal communication: 1) General assessment of a person’s non-verbal repertoire in terms of its diversity, harmony and differentiation (questions No. 1, 5, 8, 12, 15 and 17). Quantitative evaluation of this parameter can range from +9 to –9 points. 2) Sensibility, sensitivity of a person to the non-verbal behaviour of another (expert observer), the ability to identify appropriately (questions No. 2, 4, 7, 11, 14, 18 and 20). The quantitative assessment varies from 28 to 7 points. 3) The ability to manage one’s non-verbal repertoire adequately to the purpose and situation of the communication (questions No. 3, 6, 9, 10, 13, 16 and 19). The quantitative assessment varies from 23 to 2 points. The level of development of each of the described skills is calculated as the sum of points for the answers to the corresponding questions (for questions No. 5, 8, 12, 19, the points obtained are subtracted from the total for each of the three parameters). For each evaluated parameter, the arithmetic mean of three expert evaluations is calculated. Based on the total score for the three analysed parameters, a general indicator of the development level of a person’s perceptual and communication skills is determined. This indicator can vary from 0 to 60 points. Then, a qualitative analysis of the structure of the subject’s non-verbal communication is performed.

With the “Balanced Emotional Empathy Scale” by Mehrabian and Epstein, the general empathic tendencies of the study participant can be analysed, i.e. parameters such as the level of expressiveness of the ability to respond emotionally to the experience of another and the degree of correspondence/inconsistency of the signs of the experience of the object and the subject of empathy. The objects of empathy are social situations and people with whom the participant can empathise in everyday life. The questionnaire consists of 25 closed-ended judgments. The participant must rate the degree to which he/she agrees or disagrees with each of these judgements. Each response is scored from 1 to 4 points. A person’s ability to respond emotionally to other people’s experience (empathy) can be divided into the following levels: 82–90 points – a very high level; 63–81 points – high level; 37–62 points – normal level; 36–12 points – low level; 11 points or less is a very low level.

### 3 Results

In the summative phase of the experiment, the method of communicative control diagnosis (Schneider) was used to determine the level of communicative control and to examine the cognitive component in the experimental and control groups. The diagnosis showed that most of the participants in the experimental group (48.3%) had an average level of communicative control (4–6). Some respondents (16.7%) have a high level of communicative control (7–10), and 35% showed a low level of communicative control (0–3).

Most study participants have an average level of communicative control (46.6%) and have no difficulties in interaction. 18.3% of the subjects have a high level of communicative control and have well-developed communication skills. A low level of communicative control is typical for two study participants (40%).

In the summative phase of the experiment, the diagnosis of Kuznetsova was used to determine the level of expert assessment of non-verbal communication in the experimental and control groups. The results of the diagnosis show that the general assessment of the student teachers' non-verbal repertoire in terms of its variety, harmony and differentiation has a high value in nine respondents (15%), a medium value in 27 people (45%) and a low value in 24 (40%) respondents.

10 study participants (16.7%) in the experimental group have a high sensitivity to the non-verbal behaviour of others and the ability to identify adequately. This group is dominated by the tendency to empathy and compassion. 22 people (36.6%) have low scores; they do not experience negative emotions when watching a movie or reading, because they have low sensitivity. 28 people (46.7%) have an average level of sensitivity. A high ability to control their non-verbal reactions is found in 11 study participants (18.2%). Most participants have the ability to control their facial expressions, gestures and posture. In interaction, such people tend to use and control non-verbal communication tools at the right time. A low ability to control their non-verbal repertoire was found in 20 participants (33%), which manifests itself in the substitution of words with gestures. Most subjects (48.8%) showed an average level of ability to control their non-verbal behaviour.

In the control group, a high level of non-verbal repertoire was found in 4 subjects (6.6%), an average level in 30 subjects (50%), and a low level in 31 subjects (53.4%). The indicators of sensibility, sensitivity of a person to the non-verbal behaviour of others in the control group are as follows: high – 7 people (10.8%), average – 28 people (43%), low – 29 people (46.2%). High ability to control their non-verbal repertoire was found in 8 persons (12.1%). Most of the study participants (29 people – 44.5%) have an average level of control over their facial expressions, gestures and posture. Twenty-eight individuals (43.4%) demonstrated a low ability to control their non-verbal repertoire. They have difficulty correlating gestures with words. Often these individuals substitute words for gestures, so they are unable to explain their thoughts.

In the summative phase of the experiment, the diagnostics of Mehrabian and Epstein was used to determine the level of emotional response in the experimental and control groups. According to the results of the diagnostics, the average optimal level of emotional response prevails in twenty-eight subjects (47.8%), 16.7% of the subjects had

a high level of emotional response. 4 subjects had a very high level (6.7%). 6 subjects (10%) showed a very low level.

**Table 1**

*The results of the methodology “Balanced Emotional Empathy Scale” of the control group (Mehrabian and Epstein)*

<i>Level</i>	<i>Number of subjects</i>	<i>Percentage</i>
Very high (82–90)	5	7.6
High (63–81)	5	7.6
Average (37–62)	22	33.9
Low (12–36)	25	38.7
Very low (11 or less)	8	12.2

Diagnostics showed that the average level of emotional response predominated (33.9%). Students with an average level of empathy tended to judge others by their actions rather than trusting their personal impressions. In the control group, 7.6% of subjects have a very high level of emotional response. Most subjects (38.7%) showed a low level of emotional response (Table 1).

During the formative experiment, during the academic year 2022–2023, in order to form an empathic culture of students majoring in education, the experimental group conducted lectures, practical lessons and trainings on the special course “Empathic culture of a student-future teacher” developed by the authors, which includes the following blocks:

- Block 1. Formation of the emotional component of empathy.
- Block 2. Formation of the cognitive component of empathy.
- Block 3. Formation of the activity component of empathy.

The main goal of the special course is theoretical and methodological support of the process of formation of empathic culture of the teacher. The main tasks are to form empathy as a professional life value, to know ways of expressing empathy in various situations in the pedagogical process, to use empathic listening in dialogue, and to show empathy in non-verbal reactions in speech. The special course “Empathic culture of a student-future teacher” consists of 24 lecture hours and 48 practice hours (72 hours = 2 credits). Active methods of teaching (brainstorming, theatricalisation, trainings) were used for implementation of the special course within the framework of students’ study of the course “Children’s Literature”; also the programme of teaching practice for students in schools, mentoring in children’s theater “Rainbow” of the Kazan Federal University was implemented.

Practical lessons in the form of brainstorming were conducted on the basis of the works of Yershov “The Little Humpbacked Horse”, Tolstoy “The Shark”, “Jump”, “The Lion and The Dog”, Odoyevsky “The Snuff-Box Town”. A theatrical performance based on the work of Aksakov “The Scarlet Flower” was staged. In the reading and analysis of these literary works, the method of empathic reading was used, which aims to pro-

mote the reader's primary reactions (the level of direct impression), the formation of emotional reactions (the level of emotional experience) and the development of rational comprehension (analysis of the situation). Reading and analysing the works of children's book authors contributed to the understanding of the concept of "empathy", awareness of one's emotions and feelings; the development of skills to recognise the emotional states characters; the formation of empathic skills and empathic understanding.

Theatricalisation of works of children's literature aims at understanding and developing empathy. The task of theatricalisation is to develop the ability to recognise one's own emotional states and those of the other person and to develop empathic skills. Pedagogical training of students in elementary school aims to study the personality of younger school children, to explore the psychology of the child, to grasp the individual characteristics of the school child, to recognise the empathic understanding and feelings of the child by the student. Mentoring in children's theater "Rainbow" of the Kazan Federal University is aimed at development of emotional, cognitive and active components of empathy in students – future elementary school teachers. The students conducted lessons with children of primary school age, studied different ways of interaction and communication with younger school children while working on the performance and showed the activity component of empathy.

Thus, the formative experiment in the experimental group allowed to develop three components of empathy: emotional component, cognitive component and activity component. In the control experiment phase, the goal was set to determine the most effective mechanisms for the formation of empathic culture in students of pedagogical and medical universities. In the experimental and control groups of students the following tests were carried out:

- The diagnostic method of communicative control (Schneider);
- The assessment programme of non-verbal communication (Kuznetsova);
- The methodology "Balanced Emotional Empathy Scale" (Mehrabian, Epstein).

**Table 2**

*Comparative diagnostics of communicative control of the experimental and control groups (Schneider)*

<i>Level</i>	<i>Experimental group (%)</i>	<i>Control group (%)</i>	<i>Difference</i>
High (7–10)	20	17.0	3% more
Average (4–6)	55	49.2	5.8% more
Low (0–3)	25	38.8	8.8% less

Diagnostics showed the dynamics in the development of communicative control in the students of the experimental group. High and average levels of development of empathic control dominate. The students of this group showed sensitivity to the needs and problems of others, magnanimity, interest in people, emotional responsiveness, sociability, and the ability to avoid conflicts and find compromise solutions. Most respondents in the control group showed a low level of empathic skills, indicating the need for

their development (intuitive, rational, and emotional channels of empathy, management of their emotions) in order to form communicative professional competencies.

**Table 3**

*Comparative diagnostics of assessment program of non-verbal communication of the experimental (EG) and control groups (CG) (Kuznetsova)*

<i>Indicators</i>	<i>General assessment of the non-verbal repertoire in terms of its diversity, harmony, EG and CG</i>	<i>Sensibility, sensitivity of a person to the non-verbal behaviour of others, EG and CG</i>	<i>The ability to adapt one's nonverbal repertoire to the purpose and situation of communication, EG and CG</i>
High	18.4 (EG); 6.1 (CG)	20 (EG); 10.8 (CG)	21.6 (EG); 12.1 (CG)
Average	53.3 (EG); 47.5 (CG)	55 (EG); 46.1 (CG)	53.4 (EG); 46.1 (CG)
Low	28.3 (EG); 46.4 (CG)	25 (EG); 43.1 (CG)	25 (EG); 41.8 (CG)

Diagnostics showed the ability of students of the experimental group to analyse and appropriately interpret the state of the subject, to use empathic listening in dialogue, to show empathy in non-verbal responses in speech, indicating the development of the activity channel of empathy.

**Table 4**

*Comparative diagnostics of the difference in expert assessment of non-verbal communication of the experimental (EG) and control groups (CG) (Kuznetsova)*

<i>Indicators</i>	<i>General assessment of the non-verbal repertoire in terms of its diversity, harmony, EG and CG (%)</i>	<i>Sensibility, sensitivity of a person to the non-verbal behaviour of others, EG and CG (%)</i>	<i>The ability to adapt one's nonverbal repertoire to the purpose and situation of communication, EG and CG (%)</i>
High	12.3 more	9.2 more	9.5 more
Average	5.8 more	8.9 more	7.3 more
Low	17.9 less	17.9 less	16.8 less

In the experimental group, students demonstrated the dynamics of changes in empathic abilities during the process of vocational training as future elementary school teachers. For students in this group, the emotional component of empathy dominated, followed by the cognitive and active components.

In the control phase of the experiment, the development of the emotional component of empathy was demonstrated in the students – future teachers. For the students of this group, empathy manifests itself as a professional life value, a positive emotional attitude to the situation in professional pedagogical activity, a positive emotional attitude to people.

**Table 5**

*Comparative diagnostics of the level of emotional response according to the method "Balanced Emotional Empathy Scale" of the experimental and control groups (Mehrabian, Epstein)*

<i>Level</i>	<i>Experimental group (%)</i>	<i>Control group (%)</i>	<i>Difference (%)</i>
Very high (82–90)	13.4	7.6	5.8 more
High (63–81)	23.3	10.8	12.5 more
Average (37–62)	23.3	30.7	14.3 more
Low (12–36)	15	38.7	23.7 less
Very low (11 or less)	3.3	12.2	8.9 less

The experimental group developed a cognitive component of empathy, which consists of a certain knowledge about empathy, its nature and place in professional activity, understanding of the peculiarities of situations in pedagogical activity and the ability to understand a person and put oneself in his/her position. The diagnostic results demonstrated the development of the activity component of empathy in the students of the experimental group as the ability to analyse and appropriately interpret the state of the subject in the educational process, to use empathic listening in dialogue, and to show empathy in non-verbal reactions in speech and behaviour.

Particularly important is the formation of the emotional component of empathy in the experimental group – the ability to empathise with a school child, understand his/her feelings and emotions and sympathise with him/her. The results of the study showed that all three components of empathy gradually developed in the student teachers, while the cognitive component of empathy predominated in the medical students.

The experimental study showed that an empathic culture is essential for future elementary school teachers and general physicians to be competent in the person-to-person profession. The special course developed and implemented to form components of empathic culture of students of pedagogical and medical universities contributes to the development of empathy as an important professional quality of a teacher and a physician. The special course helps to form the emotional, cognitive and active components of empathy, the formation of empathic culture of students of pedagogical and medical universities. The results of the study can be used for professional activity of elementary school teachers, medical students and general physicians.

## **4 Discussion**

One of the main reasons for the ineffective professional activity of teachers and doctors is the low level of empathy, which leads to a significant decrease in professional success. Foreign and domestic scholars provide evidence of the relationship between

high professional success and high levels of empathy in a number of papers. According to Rogers (1975), a person's ability to help another depends on building warm, sincere empathic relationships. The doctor must feel the patient's inner world as if it were his own, without losing the quality of "if." In medical practice, empathy is considered an integral, stable personal quality that affects the social-perceptual and communicative sphere in the "doctor-patient" system. Scholars consider empathy as a communication skill that can be mastered and, to a lesser extent, as a purely subjective emotional experience or an innate, unchangeable personality trait. Haque (2020) considers empathy to be the most important professional quality that needs to be formed during medical university. Omid et al. (2018) revealed the relationship between empathy and human emotional intelligence: the higher the empathy, the higher the emotional intelligence. Shapiro et al. (2004) investigated the process of teaching empathy to first-year medical students by assessing an elective course in literature and medicine. Chen et al. (2019) analysed data on the mediating role of anxiety, self-efficacy, and sleep quality in the relationship between physician-reported empathy and patient illness. Garnett et al. (2020) conducted an online survey to determine the level of empathy among British medical students. Students' empathy levels were found to decrease in the third year of study, whereas first-year medical students had a higher empathic culture.

Medical empathy is defined as the ability to understand the patient's situation, point of view, and feelings, to show their understanding in a conversation, to act on that understanding, and to provide (therapeutic) help to the patient. According to Friedemann (2013), empathic behaviour does not require witnessing the patient's feelings, which can lead to excessive identification of the doctor with the patient and overstepping professional boundaries. Rogers (1994) points out the processual side of empathy: it is the entry into the inner world of another person, the sensitivity to ever-changing meanings. Pedagogical empathy is an emotional feature of the teacher, which plays a great role in the relationship between the participants in the educational process, in the perception of the other and in establishing mutual understanding between them. Ilyin (2013) confirms that teachers' empathy should manifest itself as a basic professional skill in the form of sympathy. Sympathy leads to activation of relationships of warmth, trust, care, openness and support for the child. Simonova (2013) considers it appropriate to abandon the technocratic model of training future doctors. The integration of the humanitarian component into the clinical disciplines will solve the problem of training a competitive specialist with a stable value system and the necessary general cultural and professional competencies that will enable them to perform their professional duties with high quality and responsibility.

Empathy contributes to the balance of interpersonal relations; it makes a person socially adjusted. Empathy developed in a person is a key factor of success in activities that require understanding one's own "I", emotional empathy with a partner and especially in training and education. Therefore, empathy is considered a professionally important quality of a teacher and a doctor.

## 5 Conclusion

In our study, it was found that empathy distinguishes the following components: cognitive, emotional and active. The formation of empathy mechanisms is carried out through the implementation of the model of the special course “Empathic culture of the student-future teacher”:

- the use of active teaching methods for students;
- using the method of empathic reading;
- theatricalisation of literary works;
- pedagogical practice of students in school;
- mentorship in children’s theater “Rainbow” of the Kazan Federal University.

Implementation of the special course allowed to develop three components of empathy in the experimental group: emotional component, cognitive component and activity component. The data of our study showed that students of a pedagogical university demonstrated dynamics in the developmental level of empathy. The general assessment of the non-verbal repertoire in terms of its diversity, harmony: high – more by 3.4%, average – more by 8.3%, low – less by 11.7%. Sensibility, sensitivity of a person to another’s non-verbal behaviour of another: high – more by 3.3%, average – more by 8.3%, low – less by 9.6%. The ability to use one’s non-verbal repertoire appropriately to the purpose and situation of communication: high – more by 3.4%, average – more by 4.6%, low – less by 8%. We can see the dynamics in the development level of emotional response in the experimental group. Very high – more by 6.7%, high – 6.7%, average – less by 1.6%, low – less by 5%, very low – less by 6.7%. According to the results of diagnostics, it can be stated that the average optimal level of emotional response prevails in 27 respondents (45%), 23.3% of respondents have a high level of emotional response. Eight people have a very high level (13.4%). A very low level was found in 2 people (3.3%). The diagnosis showed that the high level of communicative control in the experimental group increased by 3.3%, the average level decreased by 6.7% and the low level decreased by 10%.

The results of this study can be used in the training of students – future teachers of elementary school and students of medical universities majoring in “General Medicine”.

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*Dr. Lera Akhtyamovna Kamalova, dr. Irina Vladimirovna Novgorodtseva*

### **Mehanizmi za oblikovanje empatične kulture študentov**

*V procesu strokovnega usposabljanja bodočih učiteljev in zdravnikov je še posebej pomembno razvijati empatično kulturo kot temeljno strokovno kvaliteto sodobnega specialista (Lepičnik-Vodopivec, 2003). Komunikacija ima v pedagoški praksi ključno vlogo, saj je temeljna sestavina uspešne pedagoške prakse, ki omogoča bolj sodelovalno in izpolnjujočo učno izkušnjo za vse vpletene (Klopčič idr., 2016). Empatična komunikaci-*

ja vključuje sprejemanje, dopuščanje različnih perspektiv in čustev pri drugih ljudeh ter njihovo deljenje, tako da se omogoči ustrezna spodbuda in podpora. Učitelji, zdravniki in drugi zdravstveni delavci izvajajo aktivnosti v sistemu z neposredno komunikacijo, kjer se poskušajo primerjati z drugimi ljudmi, "razumeti" izkušnje in občutke drugega človeka, se postaviti v njegovo vlogo ter zavzeti položaj komunikacijskega partnerja (Šimec idr., 2022). Težava je v tem, da se v procesu izobraževanja in usposabljanja študentov medicine in drugih zdravstvenih delavcev veliko pozornosti posveča pridobivanju kliničnih veščin in spretnosti, premalo pa empatiji. Empatija zdravnika se kaže v sposobnosti občutiti empatijo in razumeti čustveno stanje bolnika, sočustvovati z njim.

Pedagoška dejavnost je povezana z veliko čustveno obremenitvijo učitelja. Najpomembnejša učiteljeva moralna lastnost, ki prispeva k oblikovanju njegove profesionalne komunikacijske kompetence, je empatija v odnosih z ljudmi. Empatija prispeva k uravnoveženosti medosebnih odnosov, moralni rasti osebe in učinkovitemu medsebojnemu razumevanju. V razmerah pomanjkanja topline medčloveških odnosov, ostrih negativnih sprememb v družbenoekonomski strukturi se ljudje soočajo z osamljenostjo in brezbržnostjo okolja (Dolgova in Melnik, 2014).

Empatična kultura učitelja je integrativna lastnost, ki se kaže v sposobnosti čustvenega odzivanja na občutke učencev, vzpostavljanja odnosov z njimi in upoštevanja njihovega notranjega položaja. Empatija je kazalnik poklicnega uspeha učiteljev in zdravnikov. V zvezi s tem je treba pomembno preučiti mehanizme oblikovanja empatije kot poklicno pomembne lastnosti. Problem empatije je vključen v krog splošnih problemov oblikovanja osebnosti kot znanstveni problem. Brez njegovega razumevanja je težko opraviti analizo mehanizmov in temeljnih lastnosti duhovnega in moralnega razvoja osebe. Številni tuji avtorji, kot so Jung (1996), Lipps (1907), Rogers (1994) in Kohut (2000), so preučevali empatijo v njenih različnih oblikah. Lipps (1907) je vsebino empatije predstavil kot samoobjektivizacijo v predmetu, ki je drugačen od mene, ne glede na to, ali si objektivizirano ime občutek zasluži ali ne. Po Rogersu (1994) mora imeti učitelj naslednje sposobnosti: željo po čim večji prilagodljivosti sposobnosti empatije, občutljivost za potrebe učencev; zmožnost osebnega obarvanja procesa izobraževanja in usposabljanja; odnos do ustvarjanja pozitivnih spodbud za samopodobo otrok; način lahkotne, neformalne in tople komunikacije z otroki; čustveno ravnovesje, samozavest in veselje.

Kohut (2000) je menil, da je empatija univerzalna razvojna potreba. Dojenčkova izkušnja empatičnega "zrcaljenja" skrbnika je nujna sestavina razvoja povezanega jaza in nasprotno. Travmatične napake pri zagotavljanju empatičnega "zrcaljenja" imajo ključno vzročno vlogo pri razvoju pomanjkljivosti in patologije jaza. Zhou idr. (2021) so naredili sistematičen pregled pristopov k poučevanju in ocenjevanju empatije v medicini in ugotovili, da je empatija ena od ključnih kompetenc zdravstvenih delavcev, ki jo lahko uporabijo za uspešno oskrbo bolnikov. Visoka raven empatije je bistvena za razvoj profesionalizma pri študentih, ki se usposabljujejo za zdravstvene poklice. Drugi znanstveniki (Krishnasamy idr., 2019) so opravili raziskave o tem, kako zaznave študentov medicine in učiteljev vplivajo na empatijo; kako izobraževanje vpliva na empatijo in kako se pri študentih medicine izraža sočutje. Rezultati raziskav vključujejo tudi vlogo visokošolskih učiteljev, ki pripravljajo in izvajajo izobraževanje po učnih načrtih za področje zdravstva. Yu idr. (2022) so preučevali empatijo pri študentih, učiteljih in zdravnikih ter opredelili tri dejavnike stabilnosti empatije, ki so temelj posameznikove lastnosti empatije. Dejavniki nizke stabilnosti so tisti, ki so zelo specifični za določen

položaj, in dejavniki srednje stabilnosti so tisti, ki so v okolju trajni in lahko dolgoročno vplivajo na raven empatije. Znanstvenika Sobczak in Popowicz (2019) sta primerjala ravni in lestvice empatije pri študentih, ki se izobražujejo po različnih izobraževalnih strategijah: študentih medicinskih specializacij, zdravstvene nege, porodništva, fizioterapije, psihologije, pedagogike in sociologije. Znanstveniki so opazili resen upad ravni empatije med študenti medicine. Empatija pri študentih upade po tretjem letniku študija, ne glede na vrsto univerze. Kanchan idr. (2018) menijo, da je zdravniški poklic pod drobnogledom zaradi vse slabše kakovosti zdravstvenih storitev. Ta upad pripisujejo slabšanju človeških vrednot ter pomanjkanju empatije in komunikacijskih spretnosti med zdravniki. Geoffrey (2017) je ugotovil, da je medicinski poklic v svojem profesionalizmu in praksi sprejel kognitivni model empatije ali distancirane skrbi. Trenutno obstaja vrzel v zdravniški empatiji, kar dokazujejo izpadi v oskrbi bolnikov v Združenem kraljestvu. Pri študentih medicine se lahko tudi med študijem razvijejo primanjkljaji empatije. Skupina znanstvenikov (Lermen idr., 2022) je na podlagi študije o stopnji empatične komunikacije med študenti ugotovila, da je empatija pomembna sestavina osebnostnih lastnosti, prav tako pa sposobnost obvladovanja čustev vpliva na kakovost komunikacije med njimi in bolniki.

Nemov (1999) predlaga več klasifikacij vrst empatije: čustvena empatija, kognitivna empatija, predikativna empatija, estetska empatija, egocentrična empatija in humanistična empatija. Zakharova idr. (2019) preučujejo empatijo kot osnovo komunikacije med zdravnikom in pacientom, obravnavajo razvoj empatičnega vedenja pri bodočih učiteljih in zdravnikih. Podana je analiza stališč ruskih in tujih znanstvenikov, ki odražajo bistvo pojma "zdravniška empatija". Empatija je jedro medosebnih odnosov, ki temeljijo na učinkoviti strokovni komunikaciji med zdravniki in bolniki. Shkitina idr. (2014) razkrivajo značilnosti pedagoške empatije. Menijo, da empatija v poklicnem delovanju učitelja naj ne bo toliko orodje kot glavna strategija njegovega delovanja. Za učitelja je empatija kompleksnejša lastnost, ki predstavlja organizacijo določenega vzgojnega vpliva. Rezultat tega ne bo vedno produktivna komunikacija med učiteljem in učencem, saj lahko vzgojno-izobraževalni proces zaradi resnih vplivov več naključnih dejavnikov poteka po svoje in uide izpod nadzora. Osebnostne lastnosti učitelja so neločljivo povezane s strokovnimi kompetencami. Podlasy (2004) k tem poklicnim kompetencam prišteva znanstveno navdušenje, ljubezen do svojega poklicnega dela, erudicijo, obvladovanje predmeta in učnih metod, obvladovanje tehnologij pedagoškega dela, organizacijske sposobnosti in spretnosti, pedagoški takt, obvladovanje komunikacijskih tehnologij, govorništvo in duhovno občutljivost. V procesu preučevanja poklicne komponente psihološke in pedagoške kompetence učitelja sta Sinyagina in Derkach (1998) razkrila, da učiteljeva empatija skupaj z refleksijo, fleksibilnostjo, družabnostjo in sposobnostjo sodelovanja spodbuja stanje čustvenega ugodja, intelektualno dejavnost, ustvarjalno iskanje in medsebojno razumevanje v odnosih z učenci. Analiza psihološke in pedagoške literature kaže zanimanje raziskovalcev za empatijo in nam omogoča, da empatijo opredelimo kot osebnostno lastnost, ki se izraža v sočutju in zavzetosti na podlagi genetsko pogojenih sposobnosti projekcije in čustvenega odziva na drugo osebo.

Namen študije je bil teoretično utemeljiti in eksperimentalno preveriti ravni oblikovanja empatične kulture pri študentih pedagoških in medicinskih univerz.

Cilji raziskave so bili naslednji:

- ugotavljanje najučinkovitejših metod za oblikovanje empatije pri študentih pedagoških in medicinskih smeri;
- eksperimentalno preverjanje stopnje oblikovanja empatije pri študentih pedagoških in medicinskih univerz;
- razvoj posebnega predmeta za oblikovanje empatije pri študentih pedagoške univerze.

Za preverjanje hipoteze smo uporabili različne metode, ki se med seboj dopolnjujejo: opazovanje, sumativno in formativno pedagoško ocenjevanje, spraševanje, testiranje in analizo rezultatov eksperimentalnega dela. V okviru študij sta avtorja uporabila kvantitativni pristop s tehniko anketiranja, v kateri je sodelovalo 65 študentov prvega letnika, smeri splošna medicina, Fakultete za splošno medicino Kirovske državne medicinske univerz ter 60 študentov prvega letnika izobraževalnega programa Primarno izobraževanje in tuji (angleški) jezik Inštituta za psihologijo in izobraževanje Kazanske zvezne univerze.

Raziskava je pokazala, da se študenti razlikujejo glede na naslednje komponente empatije: kognitivna, čustvena in aktivna. Oblikovanje mehanizmov empatije poteka z izvajanjem modela posebnega predmeta, ki je poimenovan Empatična kultura študenta in prihodnjega učitelja: uporaba aktivnih učnih metod za študente, uporaba metode empatičnega branja, teatralizacija literarnih del, pedagoška praksa študentov v šoli, mentorstvo v otroškem gledališču Mavrica Kazanske zvezne univerze.

Rezultati so pokazali, da so študenti pedagoške univerze pokazali dinamiko v stopnji razvoja empatije. Glede na rezultate diagnostike lahko ugotovimo, da prevladuje povprečna raven čustvenega odziva pri 45 % anketiranih, 23,3 % anketirancev pa ima visoko raven čustvenega odziva. Zelo visoko raven ima 13,4 % anketirancev. Zelo nizka raven se je pokazala pri 3,3 % anketirancev. Rezultate te študije je smiselno uporabiti pri usposabljanju študentov oz. bodočih učiteljev v osnovni šoli in študentov medicinskih univerz na področju splošne medicine.

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*Lera Akhtyamovna Kamalova, PhD (1957), Associate Professor at Kazan Federal University and Institute of Psychology and Education, Department of Primary Education.*

*Naslov/Address: 18 Kremlyovskaya Street, 420008 Kazan, Russia*

*Telefon/Telephone: (+7) 8432 065 289*

*E-mail: kamalova.kpfu@bk.ru*

*Irina Vladimirovna Novgorodtseva, PhD (1971), Assistant Professor at Kirov State Medical University.*

*Naslov/Address: 112 Karl Marx Street, 610027 Kirov, Russia*

*Telefon/Telephone: (+7) 8332 374 955*

*E-mail: novgorodtseva.ksmu@ro.ru*