# STUDY OF MIIDLE SCHOOL TEACHERS' EMPATHY IN A PROFESSIONAL ACTIVITY

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**Abstract:** Empathy is defined as a "feeling of closeness" which is "inversely proportional to the social distance between people" (Desey, 2010:154). It is manifested both as a skill and as an attitude to understand the feelings of others, take their position, respect the different point of view, and exhibit altruistic behavior arising from one's cognitive experience. In modern research, empathy is increasingly interpreted as a complete emotional-cognitive system with several interconnected plans: emotional, cognitive and behavioral. A number of studies emphasize the importance of empathy in the teacher's professional activity. Empathic teachers are able to identify the emotional needs of students and promote empathy in the classroom. They are sensitive to different learning styles and strategies, are able to identify the strengths and weaknesses of each student and apply personalized teaching methods. Empathic teachers are able not only to increase the academic achievement of their students, but also to change their attitude towards learning, increase their self-assessment and motivate them to achieve higher results. In the context of the teaching profession, empathy is disscused as a professional personal skill, which should be manifested primarily on a cognitive level – as a conscious act of support and understanding of the various states and bihevior of students in the educational process. Often in practice, however, mainly emotional manifestations of empathy on the part of the teacher, such as concern for the feelings and well-being of the student are observed, while manifestations of empathy, which include consideration of the student's condition, the ability to differentiate the student's attitude to learning, differentiating the approach to the individual student, are identified less often.

The proposed research is based on the assumption that teachers have a high level of empathy, understood as emotional sensitivity to students' problems, but fail to use empathy in teaching to achieve educational goals. In the research, empathy is considered as part of the professional skills and attitudes of teachers to apply person-centered approaches in the learning process and is named with the concept of "professional empathy". The study is performed with two scales, which are separately developed sets of statements. The first scale is BEES (Balanced Emotional Empathy Scale), developed by A. Mehbian and modified by N. Epstein (Mehrabian & Epstein, 1972). The Scale is adapted for the purpose of the study in version with 25 statements. The second scale, PES (Professional Empathy Scale), is developed as an integrative scale for determining the professional empathy of the teacher in the educational activity. For the purpose of this study BEES and PES are unified. Both scales contains 25 closed-type statements – both direct and reversible. Statements are evaluated on a 4-degree Likert scale, where 4 is completely agree and 1 – completely disagree. The study covers 273 middle school teachers. The results are analysed in three stages: Evaluation of the Scales internal consistency; Descriptive Statistic and Correlation Analyses. The research results determinated important aspects of the conducted research such as correlations between types of empathy, correlations between different scale items, and correlations between demographic factors and different research variables. The average results achieved by the examined persons are also analysed.

Keywords: teacher, empathy, professional activity.

#### 1. INTRODUCTION

In the field of psychology empathy are considered simultaneously as:

- an experience of consciousness in which the other person gives, shares, and the empathic person empathizes with what is shared (Stein, 1964);
- a response to another's experience, in which the Self experiences the feelings experienced by the other (Nagel, 1979);
- a socially conditioned feature of human character and to some extent as a genetically predetermined characteristic of temperament (Joney, 1996; Stamatov, 2019);
- basis of complex processes of identification and psychological understanding of others (Silami, 1996: 90);
- basis of all positive social relationships (Scheller & McDougal, Encyclopedia, 1998: 290);
- "feeling of closeness", "inversely proportional dependence on the social distance between people", global personality trait and permanent characteristic of human behavior (Desev, 2010: 154);

From the evolution of the concept of empathy it can be concluded that empathy is now increasingly interpreted as a complete emotional-cognitive system with several interconnected plans: emotional, cognitive and behavioral In emotional terms, empathy is understood as an experience, an emotional recognition of the emotions of other subjects

with whom the individual interacts. Cognitively, empathy is understanding, making sense of, and evaluating what is experienced. Behaviorally, it is an effective component and complicity (Boyadzhieva, 2020).

Empathy is expressed both as a skill and as understanding the feelings of others, taking another's position and respecting a different point of view, exhibiting altruistic behavior arising from one's cognitive experience (Golman, 2010; Golman, 2011). As a specific skill empathy has a human-personal orientation, and its manifestations in various aspects of life are determined by a number of factors such as the ability to accept roles, interpersonal motivation and the presence of experience in the emotional memory of the empathizer (Argyle & Henderson, 1989). According to Krol and Bartz, empathy facilitates connections with others by understanding their feelings, but it must be purposefully developed as a skill because without adequate skills, sharing another person's emotions can produce distress rather than empathic concern, leading to withdrawal from the situation rather than providing support (Krol & Bartz, 2021)

A number of studies emphasize the importance of empathy in the teacher's professional activity. Empathetic teachers can accurately identify the emotional needs of students while being able to create an environment of mutual respect between both students and teachers (Duncan at all., 2016). Such a teacher not only promotes empathy in the classroom, but is sensitive to different learning styles and strategies, being able to identify the strengths and weaknesses of each student and apply personalized teaching methods (de Klerk & de Klerk, 2018). Empathic teachers are able not only to increase the academic achievements of their students, but also to change their attitude towards learning, increase their self-esteem and motivate them for higher results, make them more engaged and confident in their abilities (Miyahara, 2011; Lindsay & Miesel, 2000; Montoya, 2018).

Although the importance of empathy in the teacher's professional activity has been proven, it should not be accepted as a complete construct with a unified manifestation in the teacher's behavior. Empathy itself has varieties that determine human behavior by giving precedence to emotional or cognitive experience. In the context of the teaching profession, contradictory manifestations of empathy are often observed. As a professional personal quality, the teacher's empathy should be manifested primarily on a cognitive level — as a conscious act of support and understanding of the various states and manifestations of students in the educational process.

Often, however, in practice, there are mainly emotional manifestations of empathy on the part of the teacher, such as concern for the well-being of the student, while manifestations of professional empathy, which include taking into account the state of the student, being able to distinguish his attitude to learning, differentiating the approach to the individual student, are less often identified. Referred to the modern constructivist perspectives in education, this problem reflects the deficits in the professional readiness of the teacher to apply approaches to stimulate the emotional-social learning of the student, as well as to create a positive educational environment aimed at supporting each student.

The proposed study is based on the assumption that teachers have a high level of empathy, understood as emotional sensitivity to students' problems, but fail to use empathy in teaching to achieve educational goals. In the research, empathy is considered as part of the professional skills and attitudes of teachers to apply person-centered approaches in the learning process and is named with the concept of "professional empathy".

### 2. MATERIALS AND METHODS

The study is performed with two scales, which are separately developed sets of statements. The first scale is BEES (Balanced Emotional Empathy Scale), developed by A. Mehbian and modified by N. Epstein (Mehrabian & Epstein, 1972). The Scale is adapted for the purpose of the study in version with 25 statements.

The second scale, PES (Professional Empathy Scale), is developed as an integrative scale for determining the professional empathy of the teacher in the educational activity.

For the purpose of this study BEES and PES are unified. Both scales contain 25 closed-type statements – both direct and reversible. Statements are evaluated on a 4-degree Likert scale, where 4 is completely agree and 1 – completely disagree.

The minimum score for each scale is 25 and the maximum -100.

The norm is determined by percentage distribution of scores after conversion of the reverse values:

25 - 35 - very low

36 - 54 - low

55 - 69 - normal

70 - 89 - high

 $90-100-very\ high$ 

According to the obtained STen results of the two scales (Table 1 and Table 2), the main assumption of the study is that teachers exhibit high levels of emotional empathy but have unstable professional empathy. This is a potential professional deficit that prevents the realization of effective educational models.

Table 1. Sten scores of the BEES

Two to 1; Stell Scores of the BEES										
STen BEES	1	2	3	4	5	6	7	8	9	10
Standard %	2,28	4,40	9,19	14,98	19,15	19,15	14,98	9,19	4,40	2,28
Score	>=56	57-65	66-73	74-77	78-80	81-83	84-87	88-91	92-94	<=95

Table 2. Sten scores of the PES

STen PES	1	2	3	4	5	6	7	8	9	10
Standard %	2,28	4,40	9,19	14,98	19,15	19,15	14,98	9,19	4,40	2,28
Score	>=56	57-63	64-65	66-67	68-69	70-71	72-73	74-76	77-81	<=81

Research involved 273 middle school teachers from Bulgarian educational system. 15,38% – between 26-35 age; 23,44% – between 36-45 age; 39,93% – between 46-55 age and 21,25% – over 55 ages. 55,68% work in schools in big towns, 31,5% – in small towns and 12,82% – in villages. Most of the respondents (40,29%) work in secondary schools, 30,4% work in primary schools, and 29,31% work in vocational or profiled high schools. 48,72% of the respondents are language teachers. 12,82% teach mathematics, 12,45% – social sciences, 11,36% –sciences, 5,13% – special educational subjects, 4,4% – technologies, and 1,47% – sports.

#### 3. RESULTS

The research results are presented with statistical, qualitative, and quantitative quantities and determinate important aspects of the conducted research such as correlations between types of empathy and average results achieved by the examined persons are also analyzed.

Internal consistency of items is evaluated by the Cronbach Alpha Consistency Assessment procedure. Alpha Cronbach's Values are shown below (Cronbach, 1988):

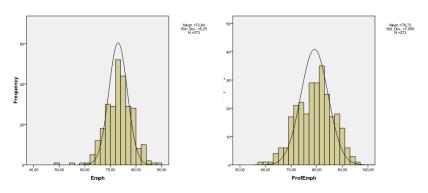
0,9 - 1,0	Excellent
0,8-0,9	Very good
0,7-0,8	Good
0,6-0,7	Modest
0 6 and down	Miserable

According to Alpha Cronbach's Values (Cronbach, 19...) the Professional Empathy Scale (PES) has a good internal consistency -0.765, but the internal consistency of adopted version of Balanced Emotional Empathy Scale (BEES) is miserable -0.553.

Both scales have no subscales, therefore factor analysis was implemented with Kaiser-Meyer-Olkin Measure of Sampling Adequacy. The aim is to prove with even greater certainty the reliability of the scales used. The Value of KMO on the BEES Scale shows good sampling adequacy -0.781. The Value of KMO on the RES Scale is also good -0.774.

Correlation analysis of scales requires first establishing the normality of the sampling distribution according to the research data obtained. Figure 1 shows the distribution of the research sample according to the results of the study with the corresponding scale (Figure 1).

Figure 1. The distribution of the research sample



In both cases the distribution is normal and that is a basis for the correlation analyses. Correlation analysis, implemented using the Pearce linear coefficient, shows a definite positive correlation between the results of the two

scales -0.481. This relationship indicates that the level of professional empathy of the respondents is directly proportional to the level of their emotional empathy.

At the same time the study variables are not particularly influenced by the demographic characteristics of the respondents. Responses to the emotional intelligence scale did not correlate with any of the characteristics of the study group, i.e., the emotional empathy of the respondents is not influenced by their age, position, teaching experience, educational institution, or town where they work.

Table 3 presents statistical values of the result on both scales.

Under the same conditions, the average score of the studied group on the scale of emotional intelligence was higher than that of the scale of professional empathy (Table 3):

Means: 78,91 > 70,71;
Median: 79 > 70;
Mode: 79 > 70.

Table 3. Statistical results of both scales

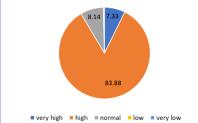
	Statistics		Statistics				
BEES			PES				
N	Valid	273	N Valid	273			
	Missing	0	Missing	0			
Mean		78,9084	Mean	70,7106			
Median		79,0000	Median	70,0000			
Mode		79,00	Mode	70,00			
Std. Deviation		7,47808	Std. Deviation	4,65190			
Kurtosis		,840	Kurtosis	1,363			
Std. Error of Kurtosis		,294	Std. Error of Kurtosis	,294			
Sum		21542,00	Sum	19304,00			
Percentiles	s 25	74,0000	Percentiles 25	68,0000			
	50	79,0000	50	70,0000			
	75	84,0000	75	74,0000			

In addition, the score of the first quartile of BEES is 74, therefore the results of only 25% of respondents are in range below high degree of emotional empathy. The score of the first quartile of PES is 68, second (mode) is 70, and the third is 74 – therefor around 50% of respondents have a normal degree of professional empathy, and around 25% demonstrate high degree of professional empathy (Table 2).

#### 4. DISCUSSIONS

The analysis of the average results of the researched teachers on both scales according to scales norm confirms the assumption that middle school teachers show a higher degree of emotional than professional empathy (Figure 2).





91.21% of respondents demonstrated high and very high levels of emotional empathy, while on the occupational empathy scale 60,81% showed a high level. There are no respondents with a very high level of professional empathy. From the obtained results, it can be claimed that secondary teachers are characterized by a normal to high level of manifestation of professional empathy (Figure 2).

Figure 3 shows the mean values of each statements of the Professional Empathy Scale (PES).

Figure 3. Mean values of the statements of PES

Means of the statements in PES

13 statements are reservable -2, 4, 9, 14, 15, 16, 18, 19, 20, 24 and 25. This means that they show a high degree of empathy when their value does not exceed 2. Figure 3 shows that such a tendency is observed in only to statement 14. I get annoyed by the loud laughter of the students – with a mean for the entire sample of 2. This statement refer to the informal part of educational interaction (Figure 3).

For the remaining 12 statements (1, 3, 5, 6, 7, 8, 10, 11, 12, 13, 17, 21, 22, 23), the average value of the indicators of a high level of professional competence of the respondents should be in the range between 3.50 and 4. Such results were obtained for 5 statements (Figure 3):

- 1. I feel sad when a student is made fun of -3.7;

3.50

2.50

1.50

- 3. I find time to talk to a student who seems depressed -3.6;
- 6. I can point out the strengths of every student I teach -3.6;
- 12. I get excited when my students give me pleasant surprises − 3,6;
- 21. I can tell which of my students are friends and which dislike each other -3.5.

Total, 24% of statements scores in PES indicated high levels of professional empathy. For of them refer to the emotional empathy of teachers in the acts of pedagogical interaction. Only statement 6. I can point out the strengths of every student I teach indicated a high level of professional empathy related to personal approaches of teaching.

#### 5. CONCLUSIONS

The main purpose of this study is to establish the level at which middle teachers can show empathy in the educational process. It has been suggested that primary teachers are more likely to display emotional empathy than professional empathy, understood as rational cognitive empathy. This could be a deficiency in implementing constructivist approaches in the educational environment.

The conclusions of the conducted study are that middle school teachers find it difficult to balance their behavior between emotional and rational (cognitive, professional) empathy. The analysis of the empirical data obtained through a study with two independent scales proves that researched teachers are emotionally empathetic towards their students, in terms of showing sympathy or sensitivity to the problems, experiences and emotions of their students. In terms of teaching, however, they prefer to exercise control and authority as well as apply more traditional teaching approaches. This professional stereotype shows that teachers still have barriers before releasing constructivist student centered teaching models.

An important conclusion is that the development of empathic abilities of teachers does not depend on their demographic characteristics such as gender, age, or work experience.

With the conducted research, the thesis was defended that the professional empathy of teachers should be developed to stimulate their non-routine, non-standard appearance in the educational environment as an important prerequisite for developing a constructivist educational environment.

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