

# IMPACT OF TEACHER EMPATHY ON STUDENT SELF-ESTEEM IN SPECIAL EDUCATION

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**Abstract**—This study investigates the relationship between teacher empathy and student self-esteem in Greek primary schools, focusing on students with special educational needs (SEN) attending Inclusion Departments and their typically developing peers in general education. Empathy is considered a key pedagogical competence, particularly in inclusive settings, where emotional support is essential for student well-being. The sample consisted of 60 teachers and 420 students from schools in Northern Greece. Results indicated that general education students exhibited significantly higher self-esteem than those in Inclusion Departments. Similarly, general education teachers reported higher levels of empathy than special education teachers. Despite these differences, no statistically significant correlation was found between teacher empathy and student self-esteem. The findings suggest that while teacher empathy contributes to a supportive classroom climate, it does not directly predict students' self-esteem. Promoting self-esteem in inclusive education requires a comprehensive approach that addresses multiple psychological, social, and instructional factors beyond the teacher-student relationship.

**Keywords**— empathy, inclusive education, self-esteem, primary education, special educational needs, teacher-student relationship

## I. INTRODUCTION

The classroom is a dynamic microcosm of social relationships, interactions, and emotional exchanges. Within this context, the teacher's personality and attitude play a crucial role in students' academic progress and psychosocial development. Empathy, as one of the key dimensions of emotional intelligence, has emerged as a central characteristic of an effective, supportive, and attitudinal teacher (Goleman, 1995; Zins et al., 2004).

Understanding students' feelings, needs, and experiences is a key prerequisite for creating a positive learning environment. The empathic teacher not only understands the learning dimension of the student's presence in the classroom but also recognizes the child as a whole person, with an inner world, needs, difficulties, and potential (Noddings, 2005). Through this relationship, a meaningful educational experience emerges that promotes students' self-esteem, self-image, and mental resilience.

This issue becomes particularly relevant for students with special educational needs (SEN) who may experience limitations or negative experiences that affect their self-perception (Avramidis & Norwich, 2002). On the other hand, typically developing students are not without the emotional influence of the school environment. Their self-esteem is influenced by teacher attitudes, acceptance experiences, and classroom dynamics (Hughes & Kwok, 2007).

This paper seeks to investigate the extent to which the empathy of teachers, both general and special education, affects the formation of their students' self-esteem. The research interest focuses on typically developing students and students with Autism Spectrum Disorder (ASD) attending the Inclusion Departments of the Greek educational system. It also investigates whether and to what extent educational policy, and more specifically the institutional framework of Inclusion Departments in Greece, supports the development of empathic relationships and the enhancement of the psychosocial well-being of all students.

## II. THEORETICAL PART

### Teacher Empathy in General and Special Education

Empathy is a critical variable in the formation of quality pedagogical relationships and the promotion of a supportive learning environment. It is defined as an individual's ability to recognize, understand, and respond to the feelings and needs of others (Davis, 1983). In the context of education, teacher empathy plays a central role in both the academic and socio-emotional development of students, as it is associated with an increased sense of safety, acceptance, and empowerment (Cooper, 2011).

Particularly in the field of special education, empathy emerges as a fundamental characteristic for effective educational practice. Students with disabilities and/or special education needs often face multiple challenges that require teachers to have increased emotional availability, understanding, and

adaptability (Parchomiuk, 2019). Teachers who possess a high level of empathy are more able to interpret their students' behavior through the lens of their particular difficulties, adopting practices of differentiated instruction and individualized support (McAllister & Irvine, 2000).

In general education, empathy contributes to the development of a school climate of acceptance and mutual respect, enhancing the psychosocial well-being of both students and teachers. Moreover, empathic teachers show an increased ability to manage conflict and prevent social exclusion (Jennings & Greenberg, 2009).

It is also noteworthy that empathy is not only a personal characteristic but also a skill that can be enhanced through targeted training and reflective practice. Professional development programs that focus on teachers' social-emotional learning, such as those based on the CASEL (Collaborative for Academic, Social, and Emotional Learning) model, have proven effective in cultivating empathy and promoting positive educational outcomes (Brackett et al., 2012).

In summary, empathy is a critical dimension of educational identity and catalyzes the successful inclusion and progress of all students, regardless of their differences.

### **The Self-Esteem of Students with or without Special Educational Needs**

Self-esteem is one of the most crucial psychological factors for the cognitive, social, and emotional development of children and adolescents. It is defined as the evaluation that an individual makes of himself or herself and the general image he or she forms of his or her worth (Rosenberg, 1965; Mruk, 2006). In the educational context, self-esteem is directly related to academic achievement, school attendance, behavior, and interpersonal relationships of the student (Marsh, 2007; Guay et al., 2003).

For typically developing students, self-esteem is enhanced when the school environment fosters a sense of acceptance, safety, and recognition of their uniqueness. Positive educational bonds, reinforcement of self-efficacy, and successful learning experiences contribute to the development of a stable and healthy self-concept (Deci & Ryan, 2000; Yeager et al., 2016).

In contrast, for students with Special Educational Needs, the formation of self-esteem is often a more complex and vulnerable process. Frequent school failure, peer comparisons, experiences of rejection or stigma, and potential social isolation can lead to low self-esteem, limited self-confidence, and feelings of inferiority (Julien, 2025; Schwab et al., 2015). Research has shown that students with learning disabilities, ADHD, or autism often evaluate their abilities negatively and experience feelings of inadequacy, particularly when they do not receive supportive feedback from their teachers and school environment (Humphrey & Lewis, 2008; Chen et al., 2004).

The existence of an accepting and empathetic environment, where students are encouraged to express their differences without fear of rejection or stigmatization, has been shown to enhance the self-esteem of all students regardless of their educational profile (Zeedyk et al., 2024; Pakarinen et al., 2017). Teachers, through empathetic discourse, a focus on potential rather than difficulties, and through the provision of meaningful feedback, can act as catalysts in strengthening self-esteem (Poulou, 2017).

At the same time, engaging students in collaborative learning schemes, amplifying their voice in the school community, and fostering positive social interactions are supportive in shaping a positive self-image (Ainscow, 2020). Particular emphasis should be placed on avoiding labeling and respecting diversity so that the school functions as a space of empowerment rather than a mechanism of exclusion.

### **The Legislative and Pedagogical Framework of Inclusion Departments in Greece**

The policy of inclusion of students with special educational needs (SEN) in mainstream schools has been a key pillar of educational reform in Greece over the last decades, as a result of both internal social demands and international commitments of the country. The creation of Inclusion Departments (D.I.D.) is part of this strategic direction, attempting to bridge the gap between special and general education, offering individualized support to students with SEN within the framework of the general school (Tsiantis, 2010).

The Integration Departments were initially established by Law 2817/2000 and subsequently strengthened by Law 3699/2008, which was a reference point for the regulation of special education in Greece. The law stipulates that the T.E.s operate within general schools in order to provide educational support to students who have been evaluated by the Educational and Counseling Support Centers (KEDASY) (formerly KEDY) and need additional instructional support, without requiring complete removal from the general classroom.

Pupils attending T.E. attend most of the timetable in the mainstream classroom but participate in specialized interventions, individually or in small groups, aimed at strengthening cognitive, social, or functional skills, always based on individualized educational programs (IEPs). These interventions are designed by the teacher of the Inclusion Department, in collaboration with the general class teacher, parents, and, when necessary, other specialists (speech and language therapists, psychologists, etc.) (Mavrogiorgou, 2014).

The operation of T.E. is an intermediate model between full integration and parallel support. Their basic pedagogical principle is flexibility, both in terms of program and methodology: differentiated teaching, multisensory methods, and inclusive assessment. At the same time, emphasis is placed on developing social skills, enhancing self-esteem, and supporting the child's all-round integration into the school and social environment (Avramidis & Norwich, 2002).

However, in practice, the operation of T.E. faces a variety of challenges. Many schools lack the necessary infrastructure, collaboration between general and special education teachers is often formal or fragmented, and teachers may lack sufficient training or guidance to implement inclusion practices (Hatjisavvidis & Zoniou-Sideri, 2011). In some cases, Inclusion Departments function as isolated spaces of 'parallel' education, which is contrary to the spirit of inclusion and equal participation.

At the legislative level, Law 4547/2018 has reinforced the importance of TEs, making them "structures of general education with a role of strengthening inclusion", while the recent Law 4823/2021 confirmed the need for interdisciplinary cooperation and systematic monitoring of TEs. Moreover, the ratification by Greece of the UN Convention on the Rights of Persons with Disabilities (Law 4074/2012) places a legal obligation for the gradual transition from the model of inclusion to the fully inclusive school.

Although T.E. is a valuable support structure, real educational inclusion requires a broader change of mindset, training, empathy, empowerment, and the creation of collaborative cultures within the school unit. Teachers - and especially those in T.E. - are called upon not only to teach but also to act as role models of acceptance and empowerment, fostering an environment where every student feels a sense of belonging.

In summary, teachers' empathy and students' self-esteem emerge as critical parameters of an inclusive educational reality. The present study seeks to investigate the correlation between these two variables in the context of general and special education, focusing on typically developing students and students with special educational needs attending inclusion classes. Based on the above, the following research questions are formulated, and the following research hypotheses are put forward:

#### Research questions:

1. What is the empathy of special education teachers, and by how much does it differ from the empathy of general education teachers?
2. What is the self-esteem of students with ASD, and by how much does it differ from the self-esteem of typically developing students?

#### Research hypotheses:

1. There is a positive correlation between teachers' sense of empathy and students' self-esteem in both groups.
2. It is expected that special education teachers' empathy determines, to a greater extent, the self-esteem of students with SEN compared to the control group

### III.METHODOLOGY

#### Research data collection procedure

To study and investigate the empathy of teachers and the self-esteem of the students of the integration classes, an empirical study was conducted during the last school year. Teachers and students of typical classes participated in the study as a control group. All students and teachers who participated in the study were located in schools in Northern Greece, where the data collection of the study was conducted. More specifically, the research was conducted in the 2024-2025 academic year. Initially, school principals were informed about the research, and then parents of students were informed about the research. If their consent was given, the questionnaires were administered to the students in both the inclusion classes and the formal classes. Correspondingly, questionnaires were completed by special and general education teachers of the same classes. Both teacher and student questionnaires were written, anonymous, completed on the spot in the classroom during the lesson, and ensured teacher and student anonymity.

In particular, 578 questionnaires were collected (there were many more students in the formal classes than in the inclusion classes, so there were more questionnaires), of which 480 were selected by simple random sampling to have an equal number of students from the inclusion classes and the formal classes.

#### Sample description

The present study was conducted in 30 inclusion classes, while 30 typical classes were used as a control group in order to record the similarities and differences between the two groups. The total number of participating teachers is 60, and the total number of participating students is 420.

Of the teachers, 30 are special educators and 30 are general education teachers. Regarding the demographic characteristics of the general education teachers: a) 15 are male and 15 are female, b) the vast majority of them are aged 46 to 55 years (N=28), c) only one of them holds a master's degree and one holds a doctoral degree, and d) all of them are permanent teachers. Similarly, among special education teachers: a) 15 are male and 15 are female; b) 13 (43.3%) are aged up to 35 years old, 10 (33.3%) are aged 36 to 45 years old, 5 (16.7%) are aged 46 to 55 years old and only 2 (6.7%) are aged 56 and over; c) about half of them hold a master's degree (56.7%) Table I provides more detailed demographic data for the participating teachers.

TABLE I DEMOGRAPHIC DATA OF PARTICIPATING TEACHERS

		Gen.Ed. Teacher		Spec. Ed. Teacher	
		N	%	N	%

Gender	Male	15	50,0%	15	50,0%
	Female	15	50,0%	15	50,0%
Age	Up until 35	0	0,0%	13	43,3%
	36-45	0	0,0%	10	33,3%
	46-55	28	93,3%	5	16,7%
	56 and above	2	6,7%	2	6,7%
Studies	Bachelor degree	28	93,3%	12	40,0%
	Postgraduate degree	1	3,3%	17	56,7%
	PhD	1	3,3%	1	3,3%
Employment status	Substitute teacher	0	0,0%	20	66,7%
	Permanent teacher	30	100,0%	10	33,3%

Regarding the 420 students who completed the questionnaire, 228 are boys (54.3%) and 192 are girls (45.7%). Of these, 114 boys (54.3%) and 96 girls (45.7%) attend classes in mainstream classes, while the remaining 114 boys (54.3%) and 96 girls (45.7%) attend classes in standard primary school classes. Furthermore, of the 420 pupils who completed the questionnaire, 78 were 3rd-grade pupils (18.6%), 113 were 4th-grade pupils (26.9%), 100 were 5th-grade pupils (23.8%), and 129 were 6th-grade pupils (30.7%). Of those attending integration classes, 34 are third-grade pupils (16.2%), 64 are fourth-grade pupils (30.5%), 55 are fifth-grade pupils (26.2%), and 57 are sixth-grade pupils (27.1%). Of those attending formal classes, 44 are 3rd-grade students (21%), 49 are 4th-grade students (23.3%), 45 are 5th-grade students (21.4%), and 72 are 6th-grade students (34.3%) (Table II).

TABLE II DEMOGRAPHIC DATA OF STUDENTS

		Attending integration class?		Total
		YES	NO	
		N	N	
Gender	Boy	114	114	228
	Girl	96	96	192
Class	3 <sup>rd</sup> primary class	34	44	78
	4 <sup>th</sup> primary class	64	49	113
	5 <sup>th</sup> primary class	55	45	100
	6 <sup>th</sup> primary class	57	72	129

### Research tool

Two (2) weighted questionnaires - scales were used to conduct the research:

A) The Greek version of the Wong and Law Emotional Intelligence Scale (Wong and Law Emotional Intelligence Scale, by Wong and Law, 2004, Adapted: Kafetsios and Zambetakis, 2008). The purpose of the scale is to assess four parameters of emotional intelligence. This consists of 16 questions, which are answered on a Likert-type scale of seven grades. The scale is structured by the four parameters of emotional intelligence of Mayer and Salovey (1997). Specifically, 1) Emotion Perception (AEP) assesses the individual's ability to understand his/her own emotions, 2) Other's Emotion Perception (OEP) assesses the individual's ability to perceive the emotions of others, 3) Emotion Use (EMS) is about the individual's ability to manage the emotions of others and finally 4) Emotion Regulation (ER) refers to the individual's ability to regulate his/her emotions.

This scale has been used in many research studies. Its initial weighting was carried out on a sample of 523 primary and secondary school teachers (Kafetsios & Zampetakis, 2008). As for the way it was scored, it was based on self-reports using Likert-type scales of seven levels (1= Strongly Disagree to 7= Strongly Agree).

As far as the validity and reliability of the scale is concerned, the following applies: The scale has good predictive validity, as it predicts both positive and negative emotions at work (Kafetsios & Zampetakis, 2008), as well as the effect of school principals' emotional intelligence on their respective teachers (Kafetsios, et al., 2011) and creativity in groups of employees with different levels of cohesiveness (Zampetakis & Kafetsios, 2010). The results from the confirmatory factor analysis showed that the scale has a good factor structure (Kafetsios & Zampetakis, 2008). Also, regarding reliability, the "Cronbach's" index for the four parameters is: 1) Emotion Perception of Emotions (APE): 0.84, 2) Perception of Others' Emotions (OA): 0.75, 3) Use of Emotion (US): 0.79, 4) Regulation of Emotion (RI): 0.89.

B) For the assessment of the self-esteem of students in the integration classes and the typical classes of primary school, the Greek version of the Self-Concept Scale for Children (Lipsitt, 1958). The purpose of the scale is to measure the child's self-concept. Specifically, it consists of 22 adjective statements that reveal to the researcher the feelings children have about themselves. This is done through the process of assessing whether the statement-adjective fits the child based on a five-point scale ranging from 1 = not

at all to 5 = always. Nineteen of the adjective statements are considered positive, while three of them (questions 18, 25, and 28 in this questionnaire, Appendix 1) are considered negative. The higher the rating, the higher the child's self-esteem. In this particular study, when the results were extracted with the help of the SPSS statistical program, for each student, the points that he/she had given in each of the aforementioned questions were added, calculating his/her self-esteem level. The lowest self-esteem score is 22, and the highest is 110. It should be emphasized here that regarding the 3 statements that have a negative meaning (18 "I am lazy", 25 "I am jealous", and 28 "I am shy"), 3 new variables were created in the SPSS program, essentially calculating the reverse statement. That is, question 18 "I am lazy" became "I am not lazy" and those who had answered this question "not at all" (1) in the new question are as if they had answered "always" (5), those who answered "not very often" (2) became "most of the time" (4) and so on. The same was done for questions 25 and 28.

Also, the following applies to the validity and reliability of this scale: The validity data presented here reveal that the scale correlates significantly and in predicted directions with the scores of the "Children's Manifest Anxiety Scale. This means that the higher the level of anxiety, the lower the score on the scale (Corcoran & Fisher, 1987), which is also the case for self-esteem. Regarding the reliability of the scale, repeated correlations ranged from 0.73 to 0.91, which indicates good consistency.

#### IV. DATA ANALYSIS

In order to examine the relationships among the study variables, a series of statistical analyses was conducted using IBM SPSS Statistics (version XX). Initially, descriptive statistics were computed for both teachers and students, including means and standard deviations for empathy and self-esteem scores. To investigate group differences in teacher empathy and student self-esteem, independent samples t-tests and one-way ANOVAs were performed. These tests explored differences based on educational role (special vs. general education), gender, employment status, and age group.

To assess the relationship between teachers' empathy and students' self-esteem, Pearson correlation analyses were conducted separately for inclusion and general education settings. Finally, to examine the predictive power of teacher empathy on student self-esteem, simple linear regression analyses were conducted for both student groups.

These methods allowed the researchers to test the formulated hypotheses and assess both direct associations and group-based variability in the key psychological constructs under investigation.

#### V. RESULTS

Subsequently, the results of the statistical analysis are presented in detail and supported by scientific evidence, in accordance with the research hypotheses and the preceding literature review. More specifically, this section presents the findings of the study conducted to investigate the relationship between teachers' empathy and students' self-esteem, within both special and general education contexts. The collected data were analyzed based on the research questions and hypotheses, focusing on potential differences between the two educational settings, as well as the correlation between the variables under investigation. The analysis aims to highlight the extent to which teachers' empathy influences students' self-perception, offering well-substantiated conclusions with implications for educational practice.

##### **The teacher's empathy**

To explore differences in teacher empathy across group samples and demographic variables (gender, employment relationship, and age), a series of independent samples t-tests and a one-way ANOVA were conducted. The results are presented in Tables III to VI.

Table III presents the results of an independent samples t-test comparing empathy levels between special education teachers and general education teachers. The results revealed a statistically significant difference,  $t(58) = 3.571$ ,  $p = .001$ , indicating that general education teachers ( $M = 94.62$ ,  $SD = 9.26$ ) reported significantly higher empathy levels than special education teachers ( $M = 84.83$ ,  $SD = 10.99$ ).

Table IV displays the results of independent samples t-tests examining gender differences in empathy within each teacher group. Among general education teachers, female participants ( $M = 90.40$ ,  $SD = 8.50$ ) scored significantly higher in empathy than male participants ( $M = 79.27$ ,  $SD = 10.55$ ),  $t(28) = -3.191$ ,  $p = .004$ . In contrast, no significant gender difference was observed in special education teachers,  $t(28) = -0.266$ ,  $p = .792$ , with males ( $M = 94.08$ ,  $SD = 11.51$ ) and females ( $M = 95.07$ ,  $SD = 7.23$ ) reporting comparable empathy levels.

Table V shows the results of a t-test assessing differences in empathy based on employment relationship (substitute vs. permanent) among special education teachers. No statistically significant difference was found,  $t(28) = 0.359$ ,  $p = .723$ . Substitute teachers ( $M = 85.35$ ,  $SD = 12.02$ ) and permanent teachers ( $M = 83.80$ ,  $SD = 9.06$ ) reported similar levels of empathy.

Table VI reports the results of a one-way ANOVA examining the effect of age on teacher empathy for both groups. No significant differences were found in empathy scores across age groups among general education teachers,  $F(1,25) = 0.541$ ,  $p = .639$ , nor among special education teachers,  $F(1,25) = 0.281$ ,  $p = .601$ . This suggests that teacher empathy is not significantly affected by age in either group.

Table GROUP DIFFERENCE IN TEACHER'S EMPATHY						III
Variable	Special Education teacher		General Education Teacher		t(58)	p
	M	SD	M	SD		
Teacher's Empathy	84.83	10.99	94.62	9.26	3.571	.001**
Note: N=60, M=Mean, SD=Standard Deviation *p<.05, **p<.01						

Table IV GENDER DIFFERENCE IN TEACHER’S EMPATHY						
variable	Men		Women		t	p
	M	SD	M	SD		
General Education Teacher’s Empathy	94.08	11.51	95.07	7.23	(28) -.266	.792
Special Education Teacher’s Empathy	79.27	10.55	90.40	8.50	(28) -3.191	.004**
Note: M=Mean, SD=Standard Deviation *p<.05, **p<.01						

Table V RESULTS OF EMPLOYMENT RELATIONSHIP DIFFERENCE IN TEACHER’S EMPATHY						
Variable	Substitute		Permanent		t(28)	p
	M	SD	M	SD		
Special Education Teacher’s Empathy	85.35	12.02	83.80	9.06	.359	.723
Note: M=Mean, SD=Standard Deviation *p<.05, **p<.01						

Table VI MEANS, STANDARD DEVIATIONS, AND ONE-WAY ANALYSES OF VARIANCE IN TEACHER'S EMPATHY ACCORDING TO THEIR AGE										
Variable	20-35		36-45		46-55		>55		F(1,25)	p
	M	SD	M	SD	M	SD	M	SD		
General Education Teacher's Empathy	-	-	-	-	94.33	9.52	98.00	5.95	.281	.601
Special Education Teacher's Empathy	86.46	9.81	81.10	15.27	86.6	7.95	88.5	.70	.541	.639
Note: M=Mean, SD=Standard Deviation *p<.05, **p<.01										

### Student's self-esteem

To examine variations in students' self-esteem based on their educational placement (inclusion class vs. general class), gender, and grade level, independent samples t-tests and a one-way ANOVA were conducted. The findings are summarized in Tables 7 through 9.

Table VII presents the results of an independent samples t-test comparing students' self-esteem between those attending inclusion classes and those in general education classes. The analysis revealed a statistically significant difference,  $t(399) = -9.791$ ,  $p < .001$ . Students in general education classes

reported significantly higher self-esteem ( $M = 91.58$ ,  $SD = 10.01$ ) than students in inclusion classes ( $M = 78.47$ ,  $SD = 16.09$ ).

Table VIII displays the results of t-tests examining gender differences in self-esteem within each student group. In the inclusion group, no statistically significant difference in self-esteem was found between boys ( $M = 80.08$ ,  $SD = 16.39$ ) and girls ( $M = 76.60$ ,  $SD = 15.60$ ),  $t(199) = 1.535$ ,  $p = .126$ . However, in the general education group, girls ( $M = 93.26$ ,  $SD = 8.52$ ) demonstrated significantly higher self-esteem than boys ( $M = 90.12$ ,  $SD = 10.98$ ),  $t(198) = -2.239$ ,  $p = .026$ .

Table IX presents the results of a one-way ANOVA investigating the effect of grade level (3rd, 4th, 5th, and 6th) on students' self-esteem in both inclusion and general classes. For students in inclusion classes, no significant difference in self-esteem was observed across grade levels,  $F(3,197) = 0.770$ ,  $p = .512$ . Similarly, for students in general classes, the effect of grade level on self-esteem was not statistically significant,  $F(3,196) = 2.149$ ,  $p = .095$ . These results suggest that self-esteem levels are relatively stable across primary school grades in both educational settings.

Table VII GROUP DIFFERENCE IN STUDENTS' SELF-ESTEEM						
Variable	Students in an inclusion class		Students in the general class		t(399)	p
	M	SD	M	SD		
Student's self-esteem	78.47	16.09	91.58	10.01	-9.791	.000**
Note: N=60, M=Mean, SD=Standard Deviation *p<.05, **p<.01						

Table VIII GENDER DIFFERENCE IN STUDENTS' SELF-ESTEEM						
Variable	Boy		Girl		t	p
	M	SD	M	SD		
Self-esteem of students in the inclusion class	80.08	16.39	76.60	15.60	(199) 1.535	.126
Self-esteem of students in the general class	90.12	10.98	93.26	8.52	(198) -2.239	.026*
Note: M=Mean, SD=Standard Deviation *p<.05, **p<.01						

Table IX MEANS, STANDARD DEVIATIONS, AND ONE-WAY ANALYSES OF VARIANCE IN STUDENTS' SELF-ESTEEM ACCORDING TO THEIR GRADE IN PRIMARY SCHOOL										
Variable	3 <sup>rd</sup> grade		4 <sup>th</sup> grade		5 <sup>th</sup> grade		6 <sup>th</sup> grade		F(1,25)	p
	M	SD	M	SD	M	SD	M	SD		
Self-esteem of students in the inclusion class	76.78	14.19	79.32	15.95	80.50	15.62	76.33	17.90	(3,197) .770	.512
Self-esteem of students in the general class	94.87	9.12	89.72	9.83	90.86	9.93	91.36	10.44	(3,196) 2.149	.095
Note: M=Mean, SD=Standard Deviation *p<.05, **p<.01										

#### Correlation Between Teachers' Empathy and Students' Self-Esteem

In order to investigate the relationship between teachers' empathy and students' self-esteem, Pearson correlation analyses were conducted separately for students in inclusion classes and students in general education classes. The results are presented in Table X.

For students attending inclusion classes, the correlation between their self-esteem and the empathy scores of their special education teachers was positive but not statistically significant,  $r = .027$ . Likewise, for students in general education classes, the correlation between their self-esteem and the empathy of their general education teachers was also positive but not significant,  $r = .044$ . These results suggest that, although the associations are in the expected direction (positive), the strength of the relationships is weak and statistically non-significant in both groups.

Table X CORRELATION BETWEEN STUDENTS' SELF-ESTEEM AND EMPATHY		
	Self-esteem of students in the inclusion class	Self-esteem of students in the general class
Special education teacher's empathy	.027	-
General education teachers' empathy	-	.044

\* $p < .05$ , \*\* $p < .01$

### Linear regression analysis

To examine whether teachers' empathy predicts students' self-esteem in inclusion classes, a simple linear regression analysis was conducted. The independent variable was the teachers' empathy score, and the dependent variable was the students' self-esteem score.

The regression model was not statistically significant,  $F(1, 199) = 0.15$ ,  $p = .703$ , indicating that teacher empathy did not significantly predict the self-esteem of students in inclusion classes. The model accounted for a negligible amount of variance in student self-esteem,  $R^2 = .001$ .

The unstandardized regression coefficient for empathy was  $B = 0.041$ ,  $t(199) = 0.38$ ,  $p = .703$ , with a 95% confidence interval ranging from -0.17 to 0.25. These results suggest that changes in teacher empathy levels were not associated with significant changes in students' self-esteem.

Multicollinearity was not a concern, as tolerance and VIF values were both 1.00.

Table XI LINEAR REGRESSION PREDICTING SPECIAL EDUCATION STUDENTS' SELF-ESTEEM FROM TEACHERS' EMPATHY						
Predictor	B	SE B	B	t	p	95% CI
(Constant)	74.99	9.18		8.17	<.001	[56.89, 93.09]
Teachers' Empathy	0.04	0.11	0.03	0.38	.703	[-0.17, 0.25]
Note: $R^2 = .001$ , Adjusted $R^2 = -.004$ , $F(1, 199) = 0.15$ , $p = .703$ .						

Subsequently, to investigate whether general education teachers' empathy predicts students' self-esteem, a simple linear regression was conducted with students' self-esteem as the dependent variable and teachers' empathy as the predictor.

The results indicated that the model was not statistically significant,  $F(1, 172) = 0.34$ ,  $p = .560$ , and explained only 0.2% of the variance in students' self-esteem ( $R^2 = .002$ ).

The unstandardized regression coefficient for teachers' empathy was  $B = 0.048$ ,  $t(172) = 0.58$ ,  $p = .560$ , with a 95% confidence interval from -0.11 to 0.21. This indicates that teachers' empathy was not a significant predictor of general education students' self-esteem.

There was no evidence of multicollinearity (Tolerance = 1.00, VIF = 1.00).

Table XII LINEAR REGRESSION PREDICTING GENERAL EDUCATION STUDENTS' SELF-ESTEEM FROM TEACHERS' EMPATHY						
Predictor	B	SE B	B	t	p	95% CI
(Constant)	86.81	7.63		11.37	<.001	[71.75, 101.88]

Teachers' Empathy	0.05	0.08	0.04	0.58	.560	[-0.11, 0.21]
Note: $R^2 = .002$ , Adjusted $R^2 = -.004$ , $F(1, 172) = 0.34$ , $p = .560$ .						

## VI.DISCUSSION

The purpose of this study was to explore the relationship between teachers' empathy and students' self-esteem within the context of both general and special education in Greek primary schools. While existing literature highlights empathy as a powerful pedagogical trait (Cooper, 2011; Jennings & Greenberg, 2009), the current findings reveal a more nuanced and limited role of empathy in directly predicting students' self-esteem.

Contrary to the initial hypothesis, the regression analyses demonstrated no statistically significant predictive effect of teacher empathy on students' self-esteem in either inclusion or general education settings. Although the direction of the correlations was positive, suggesting that higher empathy may be associated with increased self-esteem, these associations were weak and statistically non-significant ( $r = .027$  for inclusion students;  $r = .044$  for general education students). The regression models accounted for a negligible portion of the variance in self-esteem ( $R^2 = .001$  and  $.002$ , respectively).

These results diverge from earlier studies emphasizing the importance of empathetic teacher-student relationships in promoting students' psychological adjustment (Hughes & Kwok, 2007). One possible explanation lies in the complexity of self-esteem development, which is influenced by a wide range of factors beyond teacher behavior, such as peer relationships, academic performance, family support, and personal temperament (Rosenberg, 1965; Mruk, 2006).

Additionally, the context of inclusion education may introduce unique dynamics. Students with special educational needs (SEN) often face systemic barriers and internalized stigma (Julien, 2025), which might diminish the potential benefits of empathetic interactions. As Zeedyk et al. (2024) suggest, inclusive environments alone are insufficient unless accompanied by deep cultural and relational changes within classrooms.

Interestingly, descriptive comparisons revealed that general education teachers scored significantly higher in empathy than special education teachers, and students in general education classes reported higher self-esteem than their peers in inclusion settings. These findings may reflect differences in professional experience, burnout levels, or institutional support between general and special educators (Parchomiuk, 2019; McAllister & Irvine, 2000).

Despite the non-significant statistical associations, it is important not to dismiss the educational relevance of empathy. Empathy remains foundational for establishing a sense of belonging and inclusion, particularly for students with special educational needs (SEN) (Brackett et al., 2012; Pakarinen et al., 2017). Empathy may exert indirect effects, for example, by enhancing classroom climate or reducing conflict, which in turn supports self-esteem (Cornelius-White, 2007).

**Given the absence of a significant direct link between teacher empathy and student self-esteem, it is essential to consider other key contributors identified in the literature.** Peer relationships are among the most robust predictors of self-esteem in childhood and adolescence. Positive peer interactions and social acceptance foster a sense of belonging and validation, which are foundational to self-worth (Bukowski, Laursen, & Rubin, 2018). Conversely, peer rejection and bullying can have enduring detrimental effects on students' self-perception (Hymel & Swearer, 2015).

Academic self-concept is another critical domain. Students who perceive themselves as competent and successful in school are more likely to exhibit higher levels of self-esteem (Marsh & Craven, 2006). In inclusive classrooms, without targeted differentiation and support, students with SEN may experience academic difficulties that erode their confidence (Seligman, 1995).

Moreover, family dynamics, including warmth, consistency, and parental involvement, have been shown to shape self-esteem trajectories over time (Orth, 2018). For many children, a nurturing home environment acts as a buffer against school-related stressors and bolsters their sense of self.

Finally, individual temperament and psychological traits such as emotional regulation, resilience, and locus of control influence how students interpret their successes and failures (Orth & Robins, 2014; Caspi et al., 2005). Children who are more emotionally stable and internally motivated are better equipped to maintain positive self-evaluations, even in challenging contexts.

In light of these multidimensional influences, fostering student self-esteem requires coordinated and multi-layered interventions. These might include peer support programs, strength-based academic strategies, family-school partnerships, and social-emotional learning (SEL) curricula that equip students with tools for self-awareness, emotional literacy, and positive self-reflection (Durlak et al., 2011; Taylor et al., 2017).

In summary, it should also be noted the parental influence is once of the strongest factors that shape and form the sense of self-esteem in students, and, although this study did not confirm a direct predictive relationship between teacher empathy and student self-esteem, the findings highlight the need to

approach inclusion holistically, acknowledging the complex interplay of interpersonal, institutional, and societal factors involved.

### **Suggestions for Future Research**

Regarding the direct relationship between teacher empathy and student self-esteem, future research should adopt more complex and context-sensitive designs to unpack the mechanisms underlying this association. Self-esteem is a multidetermined construct, shaped by an interplay of interpersonal, intrapersonal, and systemic factors. One of those factors that are worth exploring is the parental influence on the formation of students' self-esteem. The following research directions may help clarify the indirect or conditional roles that empathy may play in student development:

#### **1. Multivariate and Moderated Mediation Models**

Future studies should utilize advanced statistical techniques (e.g., structural equation modeling) to examine potential mediating and moderating variables that may condition the relationship between teacher empathy and student self-esteem. Factors such as classroom climate, emotional support, perceived teacher fairness, or peer acceptance may act as conduits through which empathy exerts its influence (Furrer & Skinner, 2003; Roorda et al., 2011).

#### **2. Subgroup-Specific Investigations**

Given the heterogeneity of students with special educational needs, future research should focus on how empathy functions in specific subgroups, such as students with autism spectrum disorder, ADHD, or learning disabilities. These populations may interpret or respond to teacher empathy differently, and tailored approaches may be required to support their emotional and psychological development (Humphrey & Hebron, 2015; Cappadocia & Weiss, 2011).

#### **3. Longitudinal Research Designs**

Long-term studies could trace the developmental trajectory of self-esteem over time and assess whether early empathetic teacher interactions have delayed or cumulative effects on students' self-perception and emotional well-being (Orth et al., 2015). Such designs would help distinguish transient from lasting effects of teacher-student relationships.

By integrating these methodological and conceptual refinements, future research can contribute to a more comprehensive and context-aware understanding of how teacher empathy may promote—not in isolation but as part of a broader ecological system—students' self-esteem and holistic development.

## **VII. CONCLUSION**

This study offers valuable insights into the relationship between teacher empathy and student self-esteem in Greek primary schools; however, several limitations must be acknowledged. First, the cross-sectional design limits causal inferences. While associations were explored, no directionality can be confidently established between variables. Longitudinal research is needed to determine whether empathy exerts delayed or cumulative effects on self-esteem development over time (Orth et al., 2015).

Second, the reliance on self-report questionnaires may introduce social desirability bias, particularly concerning teacher-reported empathy and student-reported self-esteem. Future research should incorporate multi-informant data, including peer assessments, classroom observations, and teacher-student interaction metrics, to ensure a more robust and triangulated understanding (Brackett et al., 2012; Creswell & Plano Clark, 2018).

Third, the constructs of empathy and self-esteem are complex, multidimensional, and potentially culturally mediated. The measures used may not fully capture the relational and emotional subtleties embedded in daily classroom interactions (Zembylas, 2010). Cultural expectations around emotional expression, power dynamics, or teacher roles may further moderate the expression and impact of empathy.

Despite these limitations, the study makes a meaningful contribution to the literature on inclusive education and teacher-student relationships. The findings challenge the assumption that empathy alone is sufficient to foster students' self-esteem, highlighting instead the multifaceted nature of psychological well-being in school settings. While empathy remains a critical foundation for building supportive classroom environments, it may operate through indirect mechanisms—such as enhancing classroom climate, promoting emotional safety, or mediating conflict—which in turn foster conditions conducive to healthy self-esteem.

In conclusion, promoting students' self-esteem requires a holistic educational approach that integrates emotional, social, instructional, and structural support. Teachers' empathy, though not a direct predictor in this study, should be cultivated in tandem with broader pedagogical practices that prioritize inclusion, peer belonging, and individualized support. Future research, particularly through longitudinal and mixed-methods designs, is crucial for unraveling the dynamic interplay between interpersonal teacher qualities and students' psychological development in diverse educational settings.

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