

The Relationship between Emotional Intelligence, Social and Emotional Capacity, Empathy and Classroom Climate among Teachers

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Abstract

Teachers are required to be aware and responsive to students' implicit personal needs and not just to explicit ones. This ability is attributed to the sensitivity, emotional intelligence, social and emotional ability of teachers, as well as empathy towards the students. The aim of this study was to examine the relationship between emotional intelligence, social and emotional ability, empathy and classroom climate among 400 Arab elementary school teachers in the north of the State of Israel. The research design was quantitative-correlative. Results of the current study indicated that Emotional intelligence components, notably emotional attention and clarity, displayed strong intercorrelations, with scores hovering around a moderate mean of 3.00. Significant Gender differences emerged in areas like empathy, with males scored slightly higher than girls. In predicting classroom climate, initial regression models with demographic and professional characteristics explained only 1.7% of the variance. However, the inclusion of emotional intelligence substantially increased the explained variance to 38.5%. Moreover, addition of social competence and empathy in the model raised the explained variance to 47.8%, with emotional intelligence and empathy emerging as strong positive predictors. These findings underscore the significant influence of emotional intelligence and empathy on classroom climate, beyond demographic and professional factors. It is essential for the educational professionals and for policy makers, to pay more attention to the range of possible interventions to improve teachers' use of emotions. Teaching the subject matter takes up most of a given lesson, but students are more connected to opportunities for discussion, asking questions, and sharing experiences.

Keywords: emotional intelligence, social and emotional capacity, empathy, classroom climate.

1. Introduction

Classroom climate refers to the general atmosphere, mood, and tone inside a classroom. It encompasses both the physical and psychological aspects of the classroom, and can greatly impact students' motivation to learn, engagement with course material, and overall academic achievement. The physical environment of the classroom plays a crucial role in creating a conducive climate for

learning (Wang et al., 2020). A well-ventilated, brightly-lit, and organized classroom can boost students' alertness and enthusiasm for learning. Conversely, a poorly lit or cluttered classroom can have a negative impact on students' mood and concentration. Therefore, maintaining a healthy and comfortable physical environment in the classroom is essential for fostering a positive learning climate (Alonso-Tapia & Ruiz-Díaz, 2022; Wang et al., 2020).

Classroom climate is also shaped by the teacher's instructional style and classroom management skills. Teachers who establish clear expectations, provide consistent feedback, and maintain a respectful and supportive interaction with students can create a classroom climate that is conducive to active learning and engagement. When teachers are enthusiastic, approachable, and demonstrate a genuine interest in their students' learning, it fosters a positive classroom climate that can motivate students to participate actively and perform at their best (Ghadarghadr Jahromi et al., 2022; Mérida-López et al., 2022). The nature of peer interaction within the classroom can also influence the classroom climate. A classroom that encourages collaboration and cooperative learning tends to have a positive climate as students can learn from each other, build confidence, and develop important social skills. In contrast, a classroom where negative interactions among peers are prevalent, such as bullying or social exclusion, can lead to a hostile or stressful climate, which can hinder students' ability to learn effectively (Buyanova, 2022; Tjostheim, 2022).

The curriculum and teaching methods used in a classroom can also affect the classroom climate. Instructional approaches that are engaging, inclusive, and adaptive to diverse learning styles can contribute to a positive classroom climate. On the other hand, a curriculum that is overly rigid, lacks relevance to students' lives, or doesn't cater to their learning needs can create a disengaging and disempowering climate. In addition, the classroom climate is interconnected with the broader school culture. If the school prioritizes a culture of respect, inclusivity, and high academic expectations, this is likely to permeate into individual classrooms, contributing to a positive climate. Conversely, if the school culture is characterized by low expectations, disregard for student well-being, or lack of support for teachers, this can create a negative climate within individual classrooms (Cho et al., 2022; Sinquefield-Kangas et al., 2022). The classroom climate is a multifaceted concept that is influenced by various factors such as the physical environment, the teacher's

instructional style and management skills, peer interactions, the curriculum, and the wider school culture. Understanding these dynamics can help educators create a positive classroom climate, which in turn can enhance students' motivation, engagement, and academic achievement (Wang et al., 2020).

A teacher plays a key role in shaping the educational experience for students. They are responsible for creating a safe and inclusive learning environment, imparting knowledge, fostering critical thinking, and guiding students' social and emotional growth. The roles they play and the effectiveness with which they do so are largely determined by their skills, capacities, and competencies (La Hitu et al., 2022; Mastromatteo et al., 2022). The foremost capacity of a teacher is their subject matter expertise. A deep understanding of the content they're teaching is essential to accurately and effectively communicate complex ideas to students. Without subject matter expertise, a teacher will struggle to answer students' questions, provide real-world applications of abstract concepts, and facilitate high-quality learning experiences (Lucas-Mangas et al., 2022; Madallah, 2022).

Beyond knowledge of their subject area, a teacher must have excellent pedagogical skills. This includes understanding learning theories and principles, knowing how to plan and implement effective lessons, and being able to assess student learning in a meaningful way. This capacity allows a teacher to develop engaging and differentiated instruction that meets the diverse needs of students, thereby promoting equity and inclusivity in the classroom (Alonso-Tapia & Ruiz-Díaz, 2022; Buyanova, 2022). Another key competency for teachers is classroom management. Effective classroom management includes establishing and maintaining a positive learning environment, setting clear expectations, managing student behavior, and organizing classroom space and resources. Teachers with good classroom management skills can foster a classroom climate conducive to learning, minimizing distractions and disruptions (Cho et al., 2022; Ghadarghadr Jahromi et al., 2022).

Interpersonal and communication skills are equally important. Teachers interact with a variety of individuals including students, parents, colleagues, and administrators. The ability to communicate effectively and empathetically with all these different stakeholders is crucial. For students, this can mean explaining complex ideas in a way that they can understand, listening and responding effectively to their questions or concerns, and providing feedback in a constructive, supportive manner (La Hitu et al., 2022; Lucas-Mangas et al., 2022).

In today's digital age, technology competencies are increasingly becoming important for teachers. They need to be able to leverage various educational technologies to enhance teaching and learning. This can include using digital tools for lesson planning, instruction, and assessment, as well as integrating technology into the curriculum to prepare students for a digital future (Madallah, 2022; Mastromatteo et al., 2022). Furthermore, teachers should possess a commitment to ongoing professional development. Teaching is a dynamic profession that requires continuous learning and growth. By staying updated on the latest educational research, pedagogical strategies, and technological innovations, teachers can continuously improve their practice and effectiveness (Mérida-López et al., 2022; Sinquefield-Kangas et al., 2022).

Finally, perhaps one of the most critical capacities a teacher can have is emotional intelligence. This encompasses empathy, self-awareness, and the ability to manage one's emotions. Teachers who are emotionally intelligent can better understand and respond to their students' needs, form positive relationships with students, and maintain a balanced and productive classroom environment (Tjostheim, 2022; Wang et al., 2020). The role of the teacher is multifaceted and requires a diverse set of skills, capacities, and competencies. From subject matter expertise to pedagogical skills, interpersonal communication to technological proficiency, and emotional intelligence to a commitment to professional development, all these aspects together shape an effective teacher capable of

inspiring and educating their students (Ma et al., 2022).

Emotional intelligence, often referred to as EQ, refers to the ability to understand, manage, and effectively express one's own feelings, as well as engage and navigate successfully with the emotions of others. In the context of teaching, emotional intelligence is an essential competency that impacts various dimensions of a teacher's role and is intertwined with the learning outcomes of students (Buyanova, 2022; Wang et al., 2020).

Salovey & Mayer (1990) defined "emotional intelligence" as the ability to discern, connect and produce emotions in a way that supports thinking, to understand emotions and emotional knowledge, and to regulate emotions in a calculated way in order to bring about emotional and cognitive growth. That is, in emotional intelligence there are four basic abilities, each of which requires a combination of emotional and cognitive aspects: perception and identification of our feelings and the feelings of others; Ability to assimilate emotions within our perceptual and cognitive processes and understand the impact of emotions on those processes; Ability to understand and analyze complex emotions; Ability to manage or regulate emotions (Allred, Labat, Eadens, Labat, & Eadens, 2016; Batanova & Loukas, 2016; DeLorenzo, 2011; Estévez, Jiménez, & Segura, 2019 ; King, 2017; Morton, 2014; Tanaś, 2020; Tiwari & Pandey, 2020; Tiwari & Bhat, 2020; Waruwu, 2015).

Emotionally intelligent teachers are skilled at recognizing and understanding their own emotions. They are self-aware, meaning they can identify their feelings, understand their triggers, and regulate their emotional responses. This emotional self-regulation is critical in the classroom where a myriad of situations might provoke frustration or stress. Teachers who can manage their emotions well are able to maintain a calm and positive classroom environment, even in challenging circumstances. This skill also enables teachers to model emotional management to their students, an essential skill in students'

emotional development and well-being (Cho et al., 2022; Tjostheim, 2022).

Moreover, emotionally intelligent teachers are proficient at recognizing and responding to the emotions of their students. They can interpret various emotional signals, such as body language, tone of voice, or behavior, and can understand and empathize with their students' feelings. This emotional understanding allows them to respond effectively to students in distress, manage conflict, and create a supportive and empathetic classroom atmosphere. It fosters an environment where students feel safe, respected, and understood, which can boost their motivation, engagement, and academic achievement (Ghadarghadr Jahromi et al., 2022; Sinquefield-Kangas et al., 2022). Emotionally intelligent teachers are also adept at nurturing positive relationships with their students. They employ effective communication strategies, demonstrate empathy, and show respect and understanding towards their students' experiences and perspectives. By creating positive student-teacher relationships, they help students feel valued and connected to their learning environment, which can increase students' self-esteem, sense of belonging, and overall well-being (La Hitu et al., 2022; Mérida-López et al., 2022).

In addition, emotional intelligence helps teachers in their interactions with colleagues, parents, and administrators. It equips them with the skills to navigate difficult conversations, collaborate effectively, and build strong professional relationships. This can enhance teamwork, conflict resolution, and overall school climate (Lucas-Mangas et al., 2022; Mastromatteo et al., 2022). Emotionally intelligent teachers understand the influence of emotions on learning. They use emotional cues to adapt their teaching strategies, creating lessons that not only engage students intellectually but also emotionally. By linking learning to the emotional experiences of students, they make learning more meaningful, memorable, and engaging (Cho et al., 2022; Wang et al., 2020). Emotional intelligence is a vital competency for teachers. It empowers them to manage their own emotions,

understand and respond to the emotions of their students, build positive relationships, navigate professional interactions, and enhance the emotional dimension of teaching and learning. Ultimately, teachers with high emotional intelligence can create a supportive and engaging learning environment that caters to the holistic development of their students (Ghadarghadr Jahromi et al., 2022; Tjostheim, 2022).

Teachers' social ability is not only the extent to which teachers are supposed to provide students not only with a caring and supportive environment at the social level, but beyond that, they are required to be aware and responsive and responsive to students' implicit personal needs and not just explicit ones. This ability is attributed to the sensitivity of teachers (Pianta et al., 2002). A classroom climate is defined as a classroom environment that inevitably embodies the shared perceptions of teachers and students. The class as a whole and the teacher's ability to manage the class in an informed manner. China (Singh, 2006) argues that this is because emotional intelligence contributes to increasing the sense of creativity, promotes higher-order thinking, and significantly reduces feelings of stress and pressure among students and teachers alike. Thus, the research literature presented so far does not clearly clarify the impact of teachers' emotional intelligence, with an emphasis on empathy, on the classroom climate.

Most of the studies deal with the emotional intelligence of the students themselves, or that of the students affected by the emotional intelligence of the teachers. Most of the studies deal with the emotional intelligence of the students themselves, or that of the students affected by the emotional intelligence of the teachers (Estévez et al., 2019).

The current research

The purpose of this study was to: a) analyze the teacher's perception of the social classroom climate in Arabic schools b) explore the classroom climate associated with personal variables of the teachers such as emotional intelligence, social and emotional competence,

and empathy. We need to be clear about the dependent and independent variables. It is on this basis that we need to build the introduction.

The research hypotheses:

Teacher' emotional intelligence and classroom climate is expected to be positively correlated.

Teachers' social skills and classroom climate is expected to be positively correlated.

Teacher empathy and classroom climate is expected to be positively correlated.

Teachers' emotional intelligence and empathy is expected to be positively correlated

Teachers' emotional intelligence and social and emotional skills is expected to be positively correlated.

Teacher's level of empathy and social and emotional skills is expected to mediate the relation between emotional intelligence and classroom climate.

2. Materials and Methods

2.1 Participants

A total of 400 teachers from Arab elementary school teachers in the north of the State of Israel (72% women, $n = 288$) were involved, aged between 27-55 years ($M=40.52$, $SD=8.40$). The professors were professional seniority range between 1-29 years ($M=14.52$, $SD=8.40$); 41 (10.2%) single, 330 (82.5%) married, 29 (7.2%) divorced / separated / widowed; 203 (50.8%) teachers of scientific subjects, 197 (49.2%) teachers of humanitarian subjects; 128 (32%) qualified teachers, 152 (38%) with a bachelor's degree, 120 (30%) with a master's degree or higher; 127 (31.8%) classroom teachers.

The study was carried out in accordance with the Declaration of Helsinki.

2.2 Instruments

The use of the instruments presented below is due to their high validity and reliability. This is evidenced by their extensive use in many prestigious international studies, which are an

integral part of their work to obtain valid results.

2.2.1 Demographics

A Demographic Questionnaire was applied to collect personal information about gender, age, professional seniority, marital status (Appendix 1).

2.2.2 Class Climate

The Class Climate Questionnaire (M-DSCS-S) (Yang et al., 2013) is a valid and reliable self-report measure used to assess student's perception of schhol climate. The questionnaire includes 17 statements on a Likert scale of 1-5, where 1 - disagree at all, while 5 - strongly agree, yielding four subscales: (1) Teacher-student relationship with 6 statements, for example: I care about my students; (2) student-student relationship: contains 4 verbs, for example: students get along; (3) liking school: contains 4 phrases, for example: I wish I had gone to a different school; (4) The fairness of school rules: includes 4 statements, for example: The school rules are fair. The internal consistency of this study was adequate on a general level $\alpha=.66-.85$ (Appendix 2).

2.2.3 Emotional Intelligence

The Trait Meta-Mood Scale-24 (TMMS-24: Fernández-Berrocal et al., 2004) is a valid and reliable self-report measure of emotional intelligence. This measure contains 24 statements on a Likert scale ranging from 1 (-no agreement), to 5s (strong agreement). The items are divided into three factors: (1) Emotional Attention (8 items, statements 1-8 in Appendix 3), for example: I pay attention to my feelings; (2) emotional clarity (8 items, sentences 9-16 in Appendix 3), for example: my feelings are clear to me; (3) and emotional correction (8 items, sentences 17-24 in Appendix 3), for example: I am usually optimistic, although sometimes I feel sad. Scores were calculated for each scale and subscale by average. In the current study the reliability of the questionnaire for all its components ranges from $\alpha=.60-.83$ (Appendix 3).

2.2.4 Empathy

The Basic Empathy Scale (BES; Jolliffe & Farrington, 2006) comprises a total of 20 statements. The instrument is made up of two subscales detecting two different components of empathic responsiveness: (1) Affective Empathy subscale (AE subscale, items 1-11) measuring emotional congruence with another person's emotions, for example: other people's emotions do not affect me much; (2) The Cognitive Empathy subscale and includes 9 verbs (CE subscale, items 12-20), measuring ability to understand another person's emotions. for example: I can often understand what other people feel even before they tell me. Each item asks participants to express their own degree of agreement on a 5-point, Likert-type scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Scores were calculated for each scale and sub-scale by average. In the current study the reliability of the questionnaire is $\alpha=.82$ (Appendix 4).

2.2.5 Social and emotional competencies

The Social and Emotional Competencies Questionnaire (SEC -Q; Zych et al., 2018) is a valid and reliable instrument measuring the social-emotional competence of the students. The questionnaire contains 16 statements gauged on a five-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). items are organized on four subscales: (1) Self-knowledge (4 items, statements 1-4), for example: I know how to name my feelings; (2) Self-Management and Motivation (3 items, statements 5-7), for example: I know how to motivate myself; (3) Social awareness and pro-social behavior (6 items, statements 8-13), for example: I know what people expect from others; (4) Decision-making (3 items, sentences 14-16), for example: I make decisions after carefully analyzing the consequences. Scores were calculated for each scale and sub-scale by average. In the current study the reliability of the questionnaire is $\alpha=.83$ (Appendix 5).

2.3 Procedure

The researcher transferred the questionnaires in the appendices of the present paper to the online version using Google Forms and published the link automatically generated by the system to the teachers' social networks and emails, and also asked them to share the link with other teachers, colleagues, or other teachers in their social network. It was made clear to the participants that their participation was voluntary and without any compensation, but it was also explained to them that their participation could make an important contribution to the research of the topic discussed in this framework.

2.4 Method

The research design is quantitative-correlative. The quantitative method is based on the positivist point of view, namely the existence of certain observable facts (Williams et al., 2022). The intensity, direction, and significance of the various relationships between emotional intelligence, empathy, and class climate were examined.

In the first phase, descriptive statistics were performed to create a frequency table for the socio-demographic data. Then, descriptive statistics were conducted to examine the mean values and standard deviations of the variables. Also, the researcher performed Pearson relationships to test the relationship between the variables, and finally, a linear regression test was performed along with the Sobel test to examine the final mediation hypothesis. The Sobel test tests the significance of the mediation effect. Data analysis is performed using the statistical package SPSS version 28.

3. Results

The results of the correlations regarding the mean difference between males and females, are shown in table 1:

Table 1. *Correlations descriptive, and gender differences for emotional intelligence, empathy, social competence, and classroom climate*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total M (SD)	T-test	Male M (SD)	Female M (SD)
Emotional Intelligence	1																	3.02 (0.76)	0.42	3.05 (0.70)	3.01 (0.78)
Emotional Attention	0.85**	1																3.01 (1.05)	0.46	3.05 (1.03)	2.99 (1.07)
Emotional Clarity	0.86**	0.60**	1															3.04 (0.82)	0.32	3.06 (0.79)	3.03 (0.83)
Emotional Correction	0.81**	0.48**	0.62***	1														3.02 (0.82)	0.25	3.03 (0.77)	3.01 (0.83)
Social Competence	0.58**	0.59**	0.42***	0.42***	1													2.99 (0.57)	0.85	3.03 (0.53)	2.97 (0.58)
Self-Awareness	0.31**	0.42**	0.14**	0.19***	0.69**	1												2.94 (0.88)	0.49	2.98 (0.86)	2.93 (0.89)
Self-Management and Motivation	0.34**	0.38**	0.22***	0.23***	0.66**	0.36***	1											3.05 (0.94)	0.25	3.07 (0.95)	3.04 (0.94)
Social Awareness	0.52**	0.43**	0.44***	0.44***	0.74**	0.27***	0.31**	1										2.99 (0.72)	1.18	3.06 (0.67)	2.96 (0.74)
Decision Making	0.34**	0.34**	0.30***	0.23***	0.56**	0.23***	0.23**	0.23**	1									2.99 (0.89)	0.05	2.99 (0.97)	2.98 (0.87)
Empathy	0.49**	0.47**	0.40***	0.35***	0.47**	0.35***	0.31**	0.33**	0.27***	1								2.98 (0.52)	1.57	3.05 (0.54)	0.54 (0.51)
Emotional Cognitive	0.45**	0.42**	0.39***	0.30***	0.44**	0.29***	0.28**	0.32**	0.28***	0.83***	1							2.97 (0.58)	1.00	3.02 (0.60)	2.95 (0.57)
Cognitive	0.36**	0.35**	0.27***	0.28***	0.33**	0.28***	0.28**	0.23**	0.15**	0.81***	0.36***	1						2.99 (0.68)	1.61	3.08 (0.69)	2.96 (0.67)
Classroom Climate	0.61**	0.60**	0.47***	0.44***	0.51**	0.33***	0.39**	0.39**	0.25***	0.55***	0.46***	0.45***	1					2.98 (0.64)	1.00	3.04 (0.59)	2.96 (0.65)
Teacher-Student Relationship	0.52**	0.56**	0.33***	0.40***	0.41**	0.31***	0.29**	0.28**	0.22***	0.46***	0.35***	0.41***	0.79**	1				2.96 (0.82)	1.46	3.06 (0.78)	2.92 (0.83)
Student-Student Relationship	0.34**	0.31**	0.31***	0.25***	0.33**	0.20***	0.26**	0.27**	0.13**	0.32***	0.25***	0.27***	0.71**	0.43**	1			3.02 (0.88)	0.37	2.99 (0.87)	3.03 (0.89)
School Affection	0.49**	0.47**	0.44***	0.32***	0.39**	0.27***	0.30**	0.25**	0.22***	0.43***	0.39***	0.32***	0.71**	0.40**	0.36***	1		2.98 (0.88)	0.37	3.03 (0.90)	2.97 (0.88)
Fairness School Rules	0.39**	0.37**	0.31***	0.28***	0.35**	0.17**	0.28**	0.32**	0.15**	0.37***	0.34***	0.28***	0.68**	0.33**	0.33**	0.36**	1	2.99 (0.94)	1.16	3.08 (0.96)	2.96 (0.94)

p<.01 *p<.001

Table 1 presents correlations, descriptive statistics, and gender differences for a range of variables related to emotional intelligence, empathy, social competence, and classroom climate. Overall, the mean scores for the various constructs ranged around the 3.00 mark, with standard deviations typically falling between 0.50 and 1.05. This suggests moderate

levels of these attributes among the participants, with some variability.

Emotional intelligence and its subcomponents (emotional attention, emotional clarity, and emotional correction) showed strong intercorrelations, with coefficients often exceeding 0.80. Notably, emotional intelligence had a strong positive correlation with emotional attention ($r = 0.85$, $p < .001$) and emotional

clarity ($r = 0.86$, $p < .001$). Social competence and its facets, including self-awareness, self-management and motivation, social awareness, and decision-making, also displayed significant intercorrelations. The strongest relationship within this domain was between social competence and self-awareness ($r = 0.69$, $p < .001$). Empathy, broken down into emotional and cognitive components, showed a very strong correlation between these two components ($r = 0.81$, $p < .001$). Classroom climate, encompassing teacher-student relationship, student-student relationship, school affection, and fairness of school rules, demonstrated significant correlations among its subcomponents. The teacher-student relationship and classroom climate had a notably strong correlation ($r = 0.79$, $p < .001$).

When examining gender differences, t-tests revealed no significant differences in scores for several constructs. For instance, the difference in empathy scores between males ($M = 3.05$, $SD = 0.54$) and females ($M = 2.54$, $SD = 0.51$) was not significant ($p > .05$), with males scoring slightly higher. Similarly, there were gender differences in scores for social awareness, with males ($M = 3.06$, $SD = 0.67$) scoring slightly higher, but not significant ($p > .05$), than females ($M = 2.96$, $SD = 0.74$).

In summary, the data suggests strong interrelationships among the constructs of emotional intelligence, social competence, empathy, and classroom climate. Additionally, there are no significant gender differences in all of these areas, with males tending to score slightly higher in certain constructs.

Table 2. *Linear regression model coefficients for classroom climate*

	R ²	ΔR ²	B
Model 1	0.017	0.017	
seniority			0.001
Marital Status			0.06
field of teaching			-0.11
education			-0.06
educator			0.02
Model 2	0.385	0.369	
seniority			-0.002
Marital Status			0.10
field of teaching			-0.04
education			-0.04
educator			0.06

emotional intelligence			0.51***
Model 3	0.478	0.09	
seniority			-0.003
Marital Status			0.08
field of teaching			-0.02
education			-0.02
educator			0.02
emotional intelligence			0.32***
social competence			0.16**
empathy			0.36***

Dependent Variable: classroom climate

ΔR² - Change in R²

** $p < .01$

*** $p < .001$

Table 2 presents the results of a series of linear regression models predicting classroom climate based on various predictors. The goal of such models is to understand how much variance in classroom climate can be explained by these predictors and to determine the strength and direction of their relationships.

In Model 1, which only included demographic and professional characteristics as predictors, the model explained 1.7% ($R^2 = 0.017$) of the variance in classroom climate. Among the predictors, marital status had a positive coefficient ($B = 0.06$), suggesting that changes in marital status were associated with a slight increase in classroom climate scores. Conversely, the field of teaching and education had negative coefficients ($B = -0.11$ and -0.06 , respectively), indicating that as these variables increase, classroom climate scores might decrease. Seniority and the role of the educator had minimal coefficients, suggesting limited influence on classroom climate in this model.

Model 2 added emotional intelligence as a predictor and explained a substantially larger portion of the variance in classroom climate, with R^2 increasing to 0.385. The change in R^2 (ΔR^2) from Model 1 to Model 2 was 0.369, highlighting the significant contribution of emotional intelligence to the prediction of classroom climate. Emotional intelligence had a strong positive relationship with classroom climate ($B = 0.51$, $p < .001$). While the coefficients for the other predictors changed slightly from Model 1, their general directions remained consistent, with marital status still

showing a positive relationship and field of teaching and education showing negative relationships.

In Model 3, social competence and empathy were added to the predictors from Model 2. This model explained 47.8% of the variance in classroom climate ($R^2 = 0.478$), with an additional 9% ($\Delta R^2 = 0.09$) explained compared to Model 2. Emotional intelligence remained a significant predictor but with a reduced coefficient ($B = 0.32$, $p < .001$). Empathy emerged as another strong predictor, with a positive coefficient ($B = 0.36$, $p < .001$), suggesting that as empathy scores increase, classroom climate scores also increase. Social competence also positively predicted classroom climate ($B = 0.16$, $p < .01$). The coefficients for the other predictors in Model 3 were similar to those in Model 2, albeit slightly reduced.

In summary, while demographic and professional characteristics had some influence on classroom climate, the inclusion of emotional intelligence, social competence, and empathy in the models substantially increased the explained variance. Emotional intelligence and empathy, in particular, emerged as strong positive predictors of classroom climate.

Summary of Findings

The study examined relationships among emotional intelligence, empathy, social competence, and classroom climate using Pearson correlations, descriptive statistics, and regression analyses. Emotional intelligence components notably emotional attention and clarity, displayed strong intercorrelations, with scores hovering around a moderate mean of 3.00. Gender differences emerged in areas like empathy, where males scored slightly higher. In predicting classroom climate, initial regression models with demographic and professional characteristics explained only 1.7% of the variance. However, the inclusion of emotional intelligence substantially increased the explained variance to 38.5%. Further addition of social competence and empathy in the model raised the explained variance to 47.8%, with emotional intelligence and empathy emerging as strong positive

predictors. Collectively, these findings underscore the significant influence of emotional intelligence and empathy on classroom climate, beyond demographic and professional factors.

4. Discussion

The purpose of the present study was to examine the relationship between emotional intelligence, social and emotional skills, and empathy and classroom climate in teachers. The results indicated a significant positive relationship between emotional intelligence and classroom climate. Furthermore, the results revealed a significant positive relationship between social and emotional skills and classroom climate, as well as a significant positive relationship between empathy and classroom climate. The hierarchical regression model conducted as part of the additional results found that the three variables of emotional intelligence, social and emotional skills, and empathy predicted approximately 47.3% of the explained variance in class climate. The most important variable predicting class climate was the emotional attention component of emotional intelligence, followed by emotional clarity, and finally emotional repair. These results are consistent and in line with most of the research literature reviewed in the current study, as discussed in more detail below.

Results of the Pearson analysis results indicate that the first/second hypothesis stating a positive relationship between teacher emotional intelligence and classroom climate was confirmed. That is, the higher the teachers' emotional intelligence, the more optimal the classroom climate. These findings are consistent with the research literature (Alonso-Tapia & Ruiz-Díaz, 2022; Wang et al., 2022), which states that emotional intelligence is the ability to accurately define, express, and thus evaluate emotions; in the ability to understand and translate emotions and emotional information into rational thinking; and in the ability to control emotions to promote emotional and cognitive growth (Buyanova,

2022; Tjostheim, 2022). Emotional intelligence includes four basic skills, each of which requires a combination of emotional and cognitive aspects: Perception and identification of our emotions and the emotions of others (Cho et al., 2022; Siquefield-Kangas et al., 2022); the ability to integrate emotions into our perceptual and cognitive processes and to understand the effects of emotions on these processes; the ability to understand and analyze complex emotions; the ability to manage or regulate our emotions and sometimes those of others (Ghadarghadr Jahromi et al., 2022; Mérida-López et al., 2022).

Understanding and analyzing emotions, i.e., using emotional information, includes the following skills: the ability to name emotions, recognize connections between words and emotions, and distinguish between expressions that refer to different emotions; the ability to interpret emotional meaning in relation to different situations and events (La Hitu et al., 2022; Mastromatteo et al., 2022); the ability to understand complex emotions; the ability to recognize the frequent transitions between one emotional state and another, both in oneself and in others (Lucas-Mangas et al., 2022; Madallah, 2022).

Of all the factors that contribute to the social atmosphere in which students find themselves, the teacher is considered the most important. The teacher's attitude towards the students and the subject in general determines to a great extent how the student perceives the school, himself, and others. A teacher is the leader of the group and has a lot of power in his hands. Therefore, based on the results of the present study, he can use this power in an intelligent way by using emotions that indicate a high level of emotional intelligence (Alonso-Tapia & Ruiz-Díaz, 2022; Buyanova, 2022).

A plausible explanation for the results of the present study is that the use of emotions in teachers puts them in an optimal situation in which they shower their students with emotional support, which describes the way in which they contribute to the existence of a positive emotional climate in the classroom. Emotional support includes the degree of

respect with which the teacher treats the students, or alternatively, the degree of anger that the teacher shows toward the students. In addition, emotional support is assessed by the teacher's level of sensitivity to various interactions with the student (Cho et al., 2022; Ghadarghadr Jahromi et al., 2022).

The results of the present study indicate that there is a positive relationship between teacher empathy and classroom climate. That is, the higher the teachers' empathy, the more optimal the classroom climate (Ghadarghadr Jahromi et al., 2022; Tjostheim, 2022). When it comes to harnessing their feelings, one of the most important goals of teachers should be to create an environment that is tolerant and, most importantly, empathetic to the personal differences among students and that allows all students to develop a sense of belonging. One of the ways to achieve this in order to create an optimal classroom climate is to reduce the dimensions of competition (La Hitu et al., 2022; Siquefield-Kangas et al., 2022).

The relationship found between emotional intelligence and optimal classroom climate is correlative, and it is possible that teachers' use of emotion is a causal variable in the presence of this optimal classroom climate. Empathy is the ability to empathize with another person and experience their experiences cognitively and emotionally (Alonso-Tapia & Ruiz-Díaz, 2022; Wang et al., 2022). Empathy is a process in which a person observes the behavior of the other, attempts to recall experiences that may have caused him or her to behave similarly to the other, and draws inferences about the other's internal experience on this basis. In developing this process, a person uses his or her own imagination and fantasy, the experiences that arise in response to the other's words, and so empathy resonates, that is, an experience of temporary merging in which he or she feels the same sensations as the other (Buyanova, 2022; Tjostheim, 2022).

Empathy serves the individual with a possibility to absorb complex psychological configurations that otherwise could only be defined by an intensive and systematic acquisition effort that may be beyond his or her

capabilities. According to our results it seems that the teacher must act not according to the inner experiences of his students, but according to the emotions that are properly directed for the benefit of all students in the class. In line with this idea, empirical literature (Wang et al., 2022) shows that empathic understanding is often the only response a person can have without feeling disconnected from their own experiences (Cho et al., 2022; Sinuefield-Kangas et al., 2022).

To conclude the discussion section of this paper, it should be clarified that the emotions expressed by teachers in classrooms are largely responsible for the presence or absence of a classroom climate that promotes meaningful learning so that students want to participate out of motivation and interest in the discipline being learned rather than out of a sense of obligation. The emotional behavior of the teacher is transmitted and perceived in the classroom and influences it in significant and even marked ways. It seems that the teacher's empathy significantly and seriously improves the classroom climate, which is the basis for making the classroom a place that promotes interest in learning and knowledge acquisition.

While the study adds to our understanding a lot of important knowledge, several limitations are important to keep in mind. First, the present study examined how teachers' emotional intelligence, empathy, and social and emotional competence affect classroom climate. What really matters is how the student perceives his or her environment, not how others perceive it. Therefore, the current study was based only on teacher self-reports ("perceived climate") and not on external observations. Further research is needed to examine teacher-student interactions related to emotional intelligence and the ways in which these interactions influence actual classroom climate.

Second, the current sample included a limited number of teachers with similar socio-demographic backgrounds. Further research with a more representative sample of the teacher population is needed to improve the external and ecological validity of the results.

Moreover, the current study did not examine the potential influence of many other mediating, moderating, and controlling variables that could affect the given relationship. Additional research is needed to examine the potential impact of additional variables, much of which is addressed in the research literature.

In the current study, it was investigated and found that there is a significantly positive relationship between emotional intelligence and class climate. It was also found that there is a significantly positive relationship between social and emotional ability and class climate, and it was also found that there is a significantly positive relationship between empathy and class climate. The hierarchical regression model conducted as part of the additional results found that the three variables of emotional intelligence, social and emotional ability, and empathy predicted approximately 47.3% of the explained variance in class climate, with the most important variable predicting class climate being the emotional attention component of emotional intelligence, followed by emotional clarity, and finally emotional repair.

These findings are consistent with the majority of the research literature addressing the topic of emotional intelligence and its impact on processes in various organizational settings, including schools. It should be noted that classroom climate is not rigid, but changes over time. The elements that make up such a climate are extremely complex, ranging from the quality of interactions between individuals to the physical well-being of those individuals. There is no single factor that determines classroom climate. Therefore, the interaction between the various factors forms a kind of whole, the goal of which is to optimize the educational process. We should not underestimate the magnitude of the impact of changes in classroom climate, so that even the smallest change can lead to a significant improvement in classroom climate.

Nevertheless, it is not easy to clearly determine what specific changes in classroom climate need to be made in order to improve the level

of student academic achievement. In the current study, it was found that teachers' use of emotion is one of the elements that influence the presence of a positive classroom climate, but many other variables that may influence this climate were not examined. Classroom dynamics, in addition to interactions, include group structures and processes that influence the type and amount of knowledge conveyed in the classroom. Communication among class members, expectations of each other among class members, mutual respect among group members, and group practices are all important. These elements affect learning outcomes, such as students' attitudes, performance, and social perceptions.

The conclusion from the present study is that it is appropriate for the educational system, and especially for decision and policy makers, to pay more attention to the range of possible interventions to improve teachers' use of emotions. Ironically, in the postmodern era, emotions have become a kind of worthless trifle in the teaching process, as many and not only the good guys in the education system believe that ICT and the integration of technology in the school system is nothing but the path to meaningful learning, and thus neither the teacher nor the student is the focus, but the same embodiment called the computer, which can explain the dismal results of Israeli children in the international math tests, while the Arab student population lags behind.

There is a need for a comparative study between a special school and a regular school with regard to the possible effects of emotional intelligence, with emphasis on empathy, on the nature and quality of classroom climate.

One of the most important aspects of classroom climate is the teaching process. Teaching the subject matter takes up most of a given lesson, but students are more connected to opportunities for discussion, asking questions, joking, and sharing experiences. Teachers should use a variety of learning strategies and focus on support and success. Instruction should include flexibility and spontaneity. In addition, humor and occasional joking are encouraged in the classroom, so students prefer

teachers with a positive attitude who smile and talk to them often.

Reference

- [1] Allred, A., Labat, M., Eadens, D., Labat, C., & Eadens, D. (2016). The impact of principal emotional intelligence on teacher perception of school climate. *International Research in Higher Education*, 1(2), 127-132.
- [2] Batanova, M., & Loukas, A. (2016). Empathy and effortful control effects on early adolescents' aggression: When do students' perceptions of their school climate matter?. *Applied Developmental Science*, 20(2), 79-93.
- [3] Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist*, 26(3-4), 325-346.
- [4] DeLorenzo, D. (2011). Emotional intelligence and school climate: A study to compare middle school teacher descriptions of principal emotional intelligence and school climate in low and high need schools that have demonstrated low and high growth in student achievement. Dowling College.
- [5] Estévez, E., Jiménez, T., & Segura, L. (2019). Emotional intelligence and empathy in aggressors and victims of school violence. *Journal of educational psychology*, 111(3), 488.
- [6] King, C. S. (2017). School leader emotional intelligence and the impact on school climate in k-12 catholic schools. Indiana Wesleyan University.
- [7] Mahrer, A. R. (1997). Empathy as therapist-client alignment. In: A. C. Bohart & L. S. Greenberg (Eds.), *Empathy reconsidered: New directions in psychotherapy* (pp. 187-213). Washington: American Psychological Association.
- [8] Morton, C. L. (2014). Exploring teacher emotional intelligence and its impact on school climate (Doctoral dissertation, Kansas State University).

- [9] Pianta, R. C., La Paro, K. M., Payne, C., Cox, M., & Bradley, R. (2002). The relation of kindergarten classroom environment to teacher, family, and school characteristics and child outcomes. *The Elementary School Journal*, 102(3), 225–238.
- [10] Salovey, P., & Mayer, J. D. (1990). *Emotional Intelligence: Imagination, Cognition, and Personality*. NY, Harper.
- [11] Singh, D. (2006). *Emotional Intelligence at Work: A Professional Guide*. New Delhi: Sage Publications Pvt. Ltd.
- [12] Tanaś, Ł. (2020). Tendency to Feel Guilt, not Empathy or Shame, Relates to Supportive School Climate. *Foundations*, 5(3), 292-314.
- [13] Tiwari, G., & Pandey, A. (2020). Emotional Intelligence and Teaching Behaviour: Role of Emotional Intelligence in the Social-emotional Climate of the Classes of the Primary School Teachers.
- [14] Tiwari, P., & Bhat, A. K. (2020). The Effect of Emotional Intelligence, Empathy and Perceived Social Pressure on Predicting Social Entrepreneurial Intention: A Field Research. In *Methodological Issues in Social Entrepreneurship Knowledge and Practice* (pp. 137-158). Springer, Singapore.
- [15] Wang, M. T., Degol, J. L., Amemiya, J., Parr, A., y Guo, J. (2020). Classroom climate and children's academic and psychological wellbeing: A systematic review and meta-analysis. *Developmental Review*, 57, 100912. <https://doi.org/10.1016/j.dr.2020.100912>
- [16] Waruwu, B. (2015). The Relationship between Teachers' Perceptions about Principal's Emotional Intelligence and Organizational Climate and Job Satisfaction of Teachers of State Senior High School in Gunungsitoli Nias, Indonesia. *Journal of Education and Practice*, 6(13), 142-147.
- [17] Weisinger, H. (1998). *Emotional intelligence at work: The untapped edge for success*. San Francisco: Jossey-Bass.
- [18] Zych, I., Ortega-Ruiz, R., Muñoz-Morales, R., & Llorent, V. J. (2018). Dimensions and psychometric properties of the Social and Emotional Competencies Questionnaire (SEC-Q) in youth and adolescents. *Revista Latinoamericana de Psicología*, 50(2), 98-106.