

# International Journal of Educational Studies and Policy (IJESP)

Volume: 6, Issue: 1, May 2025

## The Mediating Role of Problem-solving Skills in the Relationship Between Emotional Intelligence Level and Classroom Management Skills: The Status of Being or Not Being a Social Studies Teacher

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### ABSTRACT

In the present study, the mediation role of problem-solving skills in the relationship between teachers' emotional intelligence levels and classroom management skills was examined based on the status of being social studies teachers or not. In this regard, situational effect analysis was examined. In the quantitative study, relational survey design was employed and data were collected through three different scales. The data of the study were obtained from 217 teachers. The analysis of the data was carried out with model 14 from Hayes modelling. Tests were carried out by taking Bootstrap 5000 samples with a 95% confidence interval. According to the results of the study, the indirect effect of problem-solving on classroom management strengthens once the teacher is a social studies teacher. Moreover, this effect is stronger on planned and programmed activities and teacher-student relationships, which are sub-dimensions of classroom management although no significant change was observed in the third sub-dimension, classroom interaction and behaviour.

**Keywords:** Social studies teachers, classroom management, emotional intelligence, problem-solving skills

**DOI:** <https://doi.org/10.5281/zenodo.15075792>


### Article Info:

**Received:** 11.12.2024

**Accepted:** 21.03.2025

**Article Type:** Research Article

**Cite as:** Berksan. G. Ö. (2025). The mediating role of problem-solving skills in the relationship between emotional intelligence level and classroom management skills: The status of being or not being a social studies teacher. *International Journal of Educational Studies and Policy*, 6(1), 137-165.

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## Introduction

Education is recognised as one of the cornerstones of the development of societies; however the role of teachers in this process is not limited to the transfer of knowledge. It also contributes greatly to the emotional and social development of students. Today's educational settings demand more skills and competences from teachers along with divergent student profiles and dynamic classroom structures. In this regard, teachers' emotional intelligence levels and classroom management skills are increasingly coming to the forefront in terms of their impact on students' academic achievement and overall learning experience.

The teaching profession is a challenging process that requires not only field knowledge but pedagogical skills, time management, crisis management and strong social-communication skills as well. Both teachers and students bring their own prejudices, experiences and emotions to the classroom. With regards to this complex social context, the fundamental task of teachers is to build a positive classroom climate and provide a good learning environment (Packard, 2021). Social studies teachers, notably, incur more responsibility for enhancing students' social sensitivity. Therefore, it is of importance for them to have a higher level of emotional intelligence in order to support students' social and emotional development as well as course content.

In recent years, numerous benefits of teachers' emotional intelligence have been revealed in terms of their professional performance, teaching-learning processes, students' school achievement, job satisfaction, stress and burnout (Valente et al., 2020). Emotional intelligence is a crucial instrument that aids individuals cope with daily life, reduce stress, and harmonise thoughts and actions (Packard, 2021). In this respect, social studies teachers are expected to communicate effectively with students, show empathy in classroom management, and resolve emotional conflicts. Teachers' emotional intelligence levels enable them to establish healthier communication with students and generate a positive learning climate (Brackett & Katulak, 2013). Moreover, inasmuch as teachers are successful in addressing stress, they can exhibit a calmer and more effective leadership in the classroom (Jennings & Greenberg, 2009).

Teachers with enhanced emotional intelligence skills show awareness to students' individual needs in classroom interactions, thus fostering student engagement and eliminating negative behaviours in the classroom (Corcoran & Tormey, 2012; Sutton & Wheatley, 2003). This creates a more positive learning setting and reinforces the teacher's effectiveness in terms of classroom management. Effective classroom management relies on teachers' ability to resolve complicated problems in a rapid and appropriate manner. Teachers who minimise conflicts and disruptions in the classroom provide a more organised learning environment. Notably in social studies courses, understanding the individual needs of students and providing them with appropriate solutions is critical for the development of social sensitivity (Emmer & Stough, 2001; Hindman & Stronge, 2004).

The development of an effective learning environment entails technical skills to control events in the classroom and meet student needs simultaneously. One of these skills is classroom management; it is unlikely to provide an effective learning environment without classroom management (Şevgin & Eranıl, 2023). Furthermore, classroom management contributes to students' developing socially accepted positive behaviours and supporting their learning processes (Nanyele et al., 2018). Therefore, the success of social studies teachers in classroom management

should not only increase academic achievement but also contribute to the development of students' social skills.

Emotional intelligence and problem solving ability of teachers in the educational process are significant determinants on classroom management. Emotional intelligence enables teachers to understand the individual needs of students, show empathy and manage negative situations in the classroom effectively. In addition, problem solving skills allow them to produce quick and accurate solutions to complex problems encountered in classroom management. Both competencies contribute to the effective fulfilment of teachers' professional roles and the achievement of students' educational goals.

Under the light of the preceding information above, this study aims to examine the mediating role of problem solving skills in the relationship between emotional intelligence levels and classroom management skills of social studies teachers and other primary school teachers. Emotional intelligence and problem solving skills are competences that support and complement one other in the teaching profession.

Based on the body of the related literature, it is seen that classroom management skills are examined within the framework of many variables. Although there are more studies on the role of emotional intelligence in teachers' effective classroom management (Brackett & Katulak, 2013 ; Corcoran & Tormey, 2012; Di, Lun, & Zhang, 2024; Dzafic & Ilic, 2024; Jennings & Greenberg, 2009; Kumar et al., 2022; Rao, 2022; Packard, 2021; Sutton & Wheatley, 2003; Valente et al, 2020), the number of studies on the effect of teachers' problem solving skills on classroom management, student-teacher relationships and the quality of the learning environment (Emmer & Stough, 2001; Hindman & Stronge, 2004; Rahimi & Asadollahi, 2012) is relatively limited. Moreover, research on the relationship between teachers' emotional intelligence and problem solving skills (Akyol & Akdemir, 2019; Ciarrochi, Forgas, & Mayer, 2006; Deniz, 2013; Kuntari & Asmarany, 2024) has also been limited. However, a study (Karagözoğlu, 2016) investigating the relationship between social studies teachers' emotional intelligence competencies and their levels of utilizing it in their profession and classroom management models has been encountered.

As can be understood from the abovementioned statements, no specific study elaboration the effect of social studies teachers' emotional state on problem solving skills in classroom management has been found. This situation offers an important research area for social studies teachers due to their sensitivity to social issues and their role in supporting students' social development. It has been thought that social studies teachers require more social interaction and emotion management skills compared to other branch teachers. Therefore, providing an insight into the relationship between emotional intelligence and problem solving skills of social studies teachers is critical for improving the quality of education and developing students' social sensitivity.

## **Conceptual Framework**

### ***Classroom Management***

Classroom management is the process through which teachers support students' learning processes by organising the elements, time and materials within the classroom. Effective classroom management aims to maximise students' potential and enable them to develop appropriate models of behaviour. It also includes dealing with unexpected situations, controlling student behaviour and creating a sustainable learning environment. The teacher's organisation of the setting, determination of rules and consistent implementation are the fundamental parts of classroom management (Sieberer-Nagler, 2016).

Classroom management is the sum of the methods and strategies employed by educators to build an appropriate classroom environment that nourish students' success and learning. Despite the fact that there are many pedagogical approaches in this field, the common outlet is that all of them includes the application of methods aimed at making students feel that they are in an environment where they can be successful, as well as creating a safe and effective learning environment (Hans & Hans, 2017). When the definitions of classroom management are examined, it is seen that teachers' strategies to create and maintain the most appropriate learning conditions by providing effective and efficient learning experiences for their students are at the forefront (Khansir & Mirzaei 2024; Nurdin, 2024). An effective teaching that attracts students' attention and arouses excitement in them is also deemed as a powerful way to reduce the impact of uncontrollable factors and prevent negative behaviours (Levin & Nolan, 2023, p.13). Classroom management plays a critical role in creating an effective teaching environment and is directly related to teachers' competences and skills (Sieberer-Nagler, 2016).

The positive contributions of effective classroom management to instructional quality can not be ignored, as effective classroom management promotes a positive learning environment which is essential for student engagement and achievement (Habsy et al., 2023). The teacher not only ensures order but also promotes the active participation of students by improving the quality of teaching. This process requires the teacher to use preventive and interventionist strategies along with a democratic and humane leadership approach. Discipline should encourage both obedience and self-control and responsibility. The teacher creates a learning atmosphere that makes success possible by arranging the classroom environment, organising the lesson in a logical flow, using time efficiently and motivating students (Savage & Savage, 2009).

Teacher-student relationships should not be left to coincidence or the personalities of individuals; instead, they should be deliberately constructed through strategies evidenced by research. Effective classroom management requires teachers to be sensitive towards student needs through a balanced use of dominance and co-operation. Strong teacher-student interactions are the key to high student achievement by creating positive classroom dynamics (Marzano & Marzano, 2003). As an effective classroom manager, the teacher is required to have the skills to plan and prepare the educational process, know how to organise teaching and how to guide the class. In addition, an effective teacher needs to create a positive classroom climate and develop work discipline. The teacher should also have the ability to evaluate students' progress and include his/her own work in this evaluation process (Delceva-Dizdarevik, 2014).

Strategies such as starting and ending the lesson on time, maintaining a good student-teacher relationship, ensuring positive interaction between students, using clear language and

communication skills, selecting appropriate teaching materials, giving immediate reinforcement and feedback, developing the lesson with appropriate lesson approach and sequence, and providing a good physical arrangement depending on the teaching-learning situation are among the significant elements of effective classroom management (Chathurika, 2017). Teachers' effective classroom management positively affects students' academic achievement; in this context, strong classroom management skills such as modelling ideal behaviours, encouraging assuming responsibility, developing positive relationships and making the course content interesting support the learning process by decreasing unwanted behaviours in the classroom environment (Özen & Yıldırım, 2020).

Effective teaching entails important skills in managing the tasks and situations occurring in the classroom every day. Classroom management includes a variety of skills and techniques that teachers can use to keep students organised, active, attentive and productive in the classroom. When classroom management strategies are implemented effectively, teachers minimise behaviours that interfere with learning for both individuals and groups of students. Effective teachers tend to exhibit strong classroom management skills; the hallmark of an inexperienced or less effective teacher is a less organised classroom environment in which students are less attentive and engaged (Dustova & Cotton, 2015). The fundamental factor in educational success is the level of the teacher's classroom management skills since success in classroom management depends mainly on the effective use of the teacher's leadership and management skills. Processes such as planning, organisation, communication and rewarding constitute the basic elements of classroom management and directly influences the academic success of teachers and students (Ergin, 2019).

Once a teacher loves teaching, he/she reflects this feeling to his/her students and the students become eager to learn as well. Effective teachers exhibit a high level of enthusiasm that reflects their professional competence and confidence. Classroom climate has a critical importance in increasing students' commitment to school (Sieberer-Nagler, 2016).

### ***Emotional Intelligence***

Emotional intelligence is a key concept that refers to the capacity of individuals to recognise, understand and manage their own and others' emotions (Singh et al., 2022). This ability also includes the capacity to solve one's internal problems and evaluate the emotional states of others (Zafar & Akhtar, 2023). To cite an example, recognising frustration in a student's behaviour and helping him/her cope with this emotion is essential for an effective intervention (Packard, 2021, p.25). The process of perceiving, understanding and managing emotions entails systematic introspection.

Emotional intelligence in education significantly improves the emotional competencies of teachers and students, leading to increased self-regulation, motivation, empathy, learning motivation and academic performance (Dzafic & Ilic, 2024). Correspondingly, it offers coping strategies that positively affect classroom dynamics by improving interactions between teachers and students (D'Ambrosio, 2002; Rao, 2022; Kumar et al. 2022). Teachers use emotional intelligence in classroom management by understanding their students' emotions, which helps to build relationships and overcome crises. Self-control and emotionality are key factors that enable teachers to manage unexpected situations in the classroom effectively (Packard, 2021). It is quite difficult to achieve emotional understanding of others, especially when dealing with immature and insensitive students, which complicates the task of teachers. The teacher needs to take careful steps



to know the causes and consequences of the behaviour, as any negative behaviour of the teacher may make the student feel guilty and hesitate to share his/her problem or feelings with the teacher next time (Iram, 2022).

Teachers have a significant impact on students' emotions and the subjects they teach play a decisive role on students' positive and negative emotions (Ariapooran & Etemadi, 2020). According to Valente et al. (2020), teachers with high levels of emotional intelligence exhibit a more integrative and conciliatory approach in conflict management. In this perspective, there is a significant relationship between emotional intelligence and problem solving (Deniz, 2013; Di, Lun, and Zhang, 2024). Institutions and individuals can benefit from the development and use of behaviours attributed to emotional intelligence. The practice of emotional intelligence skills may contribute to solving complicated management problems at individual and group level (Hess & Bacigalupo, 2014). Teachers' emotional intelligence skills positively affect teacher efficacy and teachers who are prone to perceive and manage emotions are beneficial for the personal development of students as well as for the constructing a positive and self-regulated learning setting. In addition, teachers' emotional intelligence skills play a decisive role in the performance of their work (Valente et al., 2020).

The effectiveness of classroom management is greatly influenced by emotional intelligence; besides, it positively influences classroom management skills such as organizing activities and maintaining order (Di, Lun, & Zhang, 2024). It helps teachers regulate their behaviour in the classroom, sustain discipline, and develop a positive learning environment (Jeyapriya & Jayachithra, 2024). The presence of teachers with high emotional intelligence in the classroom shows that the different characteristics of teachers' emotional intelligence are a dynamic factor in terms of successful education (Valente & Lourenço, 2020). Within the school or classroom, teachers notice and interact with a range of students' emotions (such as disappointment, hope, anger, joy, sadness, expectation, appreciation, passion, humor, love, loneliness, and compassion). In this regard, teachers should recognize and interpret these emotions to guide students towards learning (Packard, 2021). When teachers believe they have the ability to understand and regulate emotions, they will be able to exhibit higher emotional intelligence (Kanesan & Fauzan, 2019).

The emotional intelligence levels of teachers play an important role in the academic success of students. Research shows that emotional intelligence reduces teachers' burnout levels in the classroom, increases their engagement with their work, and thereby enhancing students' achievement. Additionally, it has been determined that teachers' perception of self-efficacy strengthens the relationship between job commitment and academic success. This situation emphasizes that emotional intelligence training should be part of the curriculum for both teacher candidates and current teachers (Wang, 2022). The emotional intelligence of teachers has a strong and significant impact on the school climate (Iram, 2022). Emotional intelligence refers to individuals' capacity to recognize, understand, and manage their own emotions, while classroom management skills encompass teachers' abilities to organize the classroom setting effectively, ensure student participation, and prevent negative behaviours. In the literature, there are findings that teachers with high emotional intelligence may build a more positive learning environment in the classroom and communicate with students more effectively.

### ***Problem-solving skill***

Problem-solving is a fundamental characteristic of human life, and individuals develop this skill by adapting to changing conditions and goals. Rapidly changing social dynamics require individuals to be effective problem solvers with the ability to cope with challenges; today, this skill stands out as the key to scientific and societal progress. Problem-solving also involves the interaction between a person's experience and the demands of the task (Martinez, 1998). The role of the teacher in education extends beyond conveying curriculum objectives to students; teachers must provide students with the necessary instruments to experience social and academic achievement both inside and outside the classroom. In this context, teachers need to empower students with the tools to critically analyse the world around them so that they can become critical independent thinkers. Moreover, empowering students with the ability to define, analyse, and evaluate the vast amount of information available in our rapidly changing digital world entails the use of skills associated with higher levels of thinking (Franklin & Harrington, 2019). Problem-solving also refers to students' capacity to cope with complicated and unexpected situations. This allows students to analyze real-life problems and develop effective and applicable solutions (Devi, 2016). Thus, problem-solving skills are gaining importance as a critical factor that optimizes learning processes at both individual and group levels.

Problem-solving skills are defined as an important component of emotional intelligence and enable teachers to support students' academic and social success. These skills aim to create creative and collaborative learning environments in the classroom, enhance students' motivation, and positively impact the overall atmosphere within the classroom (Rahimi & Asadollahi, 2012; Durlak et al., 2011). For teachers, problem-solving skills may seem simple at first glance, yet they actually involve a complex process; as even situations that appear simple may require the individual to use both cognitive and perceptual abilities simultaneously. Therefore, problem-solving processes often require more effort and depth than one might think (Roesler, 2017).

Student behaviours affect teachers' stress levels and student-teacher relationships (Schaubman et al., 2011). This requires problem-solving skills to enable teachers to effectively manage the challenges they face in the classroom, propose innovative solutions, and construct a positive learning setting. These skills help teachers quickly identify problems and generate solutions, improve student outcomes, and adapt to different learning needs. Problem-solving strategies enable teachers to manage classroom dynamics, engage students, and address individual learning deficiencies, thereby increasing teaching effectiveness and the efficiency of classroom operations (Jeyapriya & Jayachithra, 2024). Consequently, problem-solving skills stand out as an important competency that supports teachers in dealing with various classroom challenges they encounter.

### **Theoretical Background**

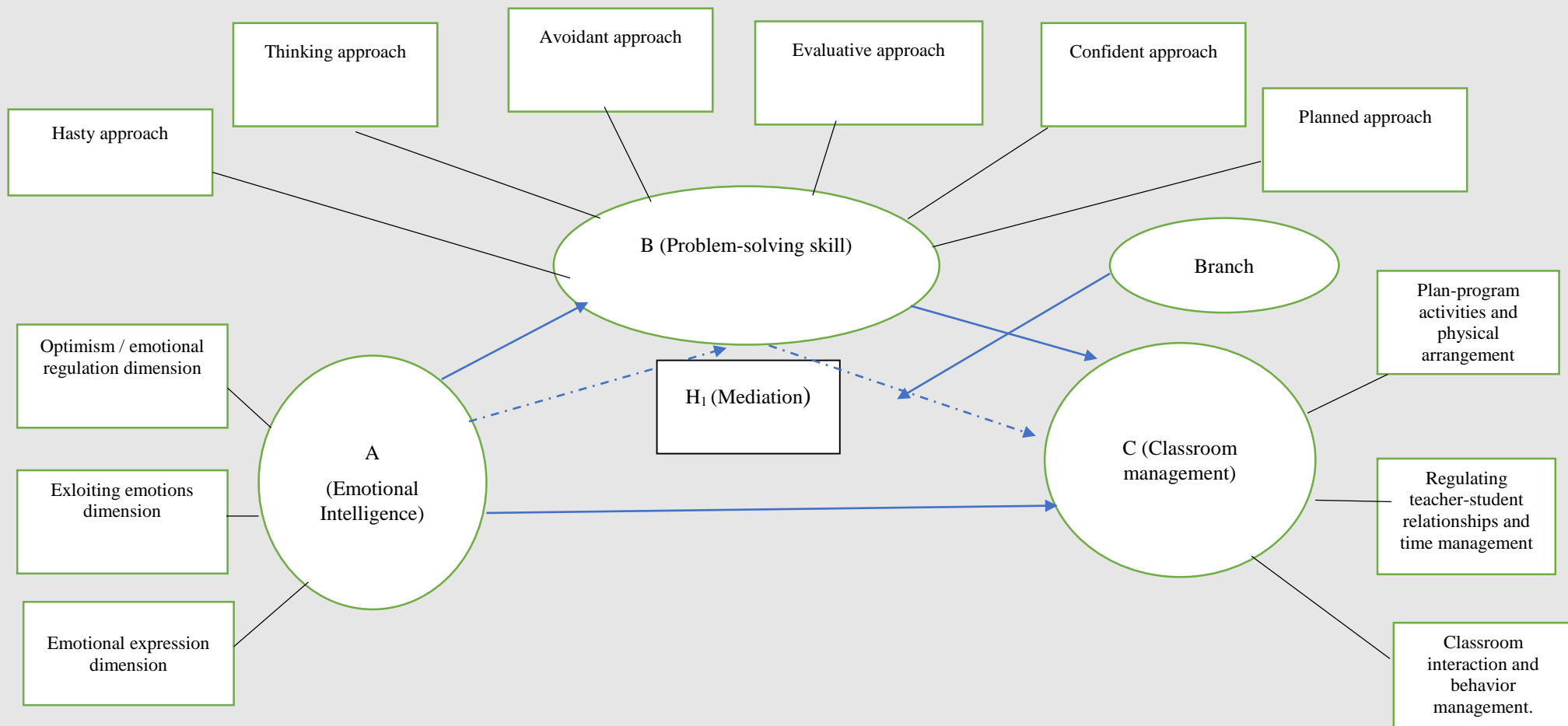


Figure1. Conceptual model



## **Research Hypotheses**

H<sub>1</sub>: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and classroom management levels is moderated by being a social studies teacher.

H<sub>2</sub>: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the planning-programming activities and physical arrangement dimensions of classroom management is moderated by being a social studies teacher.

H<sub>3</sub>: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the teacher-student relationships and time management dimensions of classroom management is moderated by being a social studies teacher.

H<sub>4</sub>: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the classroom interaction and behavior regulation dimensions of classroom management is moderated by being a social studies teacher.

## **Method**

### **Research Model**

The present study is quantitative research designed in a relational survey pattern. The survey method is an approach aimed at describing a situation as it exists in the past or present (Karasar, 2009). The relational survey design, on the other hand, aims to analyse the interactions and possible relationships between two or more variables by determining the correlation values between them (Büyüköztürk et al., 2009, p. 16). In this study, the mediating role of problem-solving skills in the relationship between teachers' emotional intelligence level was examined.

### **Sample**

The sample of the research consists of social studies teachers and other middle school teachers working in Turkish state schools affiliated with the Ministry of National Education in the 2024-2025 academic year. A total of 217 teachers participated in the study. Of all participants, 126 of the participants are women and 91 are men. While 89 teachers specialize in social studies, 128 teachers are not social studies teachers. The age range varies between 24 and 60. Their professional seniority ranges from 1 year to 34 years. Based on their education levels, 162 teachers hold a bachelor's degree, 48 teachers a master's degree, and 7 teachers a doctorate. In terms of marital status, 132 are married and 85 are single.

### **Instruments**

In the study, data were collected using three different scales. Additionally, a section consisting of seven questions was added to the data collection form to determine the participants' demographic information (such as gender, age, and professional seniority). Information regarding the scales administered in the study is presented below in order:

#### ***Classroom Management Scale***

In this study, the version of the "Classroom Management Skills Scale" developed by Delson (1982) and adapted into Turkish by Yalçınkaya and Tonbul (2002) was used. The scale has a 5-point Likert-type structure and consists of a total of 15 items. The items of the scale are rated as "very good", "good", "average", "poor" and "very poor". The scale consists of three sub-

factors: “Physical Arrangement Plan Program Activities”, “Regulation of Teacher-Student Relationships” and “Time Management and Classroom Interaction and Behavior Regulations”. As for the findings regarding the validity and reliability of the scale, the value for construct validity (KMO) was found to be .96, and the Bartlett’s test results were 1909.176 ( $p < 0.00$ ). In addition, it was observed that the factor structure of the scale explained 58.42% of the total variance. It has been concluded that the Cronbach alpha coefficient value is  $\alpha = 0.92$ .

### ***Emotional Intelligence***

The “Emotional Intelligence Scale”, developed by Schutte et al. (1998) and revised by Austin et al. (2004), was administered. The adaptation of the scale into Turkish was carried out by Göçet (2006). The scale consists of a total of 37 items in a 5-point Likert type. The items of the scale are rated with “strongly agree”, “agree”, “neutral”, “disagree”, “strongly disagree”. The first sub-dimension of the Emotional Intelligence Scale, which is the optimism/mood regulation dimension, consists of a total of 17 items. The second sub-dimension of the Emotional Intelligence Scale, the dimension of utilizing emotions, consists of a total of 6 items. The last sub-dimension of the Emotional Intelligence Scale, the expression of emotions dimension, consists of a total of 14 items. When examining the findings related to the scale's validity and reliability, the (KMO) value for construct validity was found to be .85, and the Bartlett’s results were 3893.603 ( $p < 0.00$ ). Additionally, it was observed that the factor structure of the scale explained 62.35% of the total variance. It was concluded that the Cronbach alpha coefficient value is  $\alpha = 0.89$ .

### ***Problem-solving skill***

The "Problem Solving Inventory" was developed by Heppner and Petersen (1982) and the Turkish version adapted by Şahin, Şahin, and Heppner (1993) was used. The scale consists of a total of 35 items in a 6-point Likert type. The items of the scale are rated with "I always behave like this," "I mostly behave like this," "I often behave like this," "I sometimes behave like this," "I rarely behave like this," "I never behave like this." Concerning the findings regarding the validity and reliability of the scale, the value for construct validity (KMO) was found to be .90, and the Bartlett's test results were 5825.501 ( $p < 0.00$ ). Additionally, it was observed that the factor structure of the scale explained 68.46% of the total variance. It has been concluded that the Cronbach alpha coefficient value is  $\alpha = 0.98$ . The fit index values for all three scales are presented below in Table 1.

Table 1. Fit index and reference intervals

Indices	Good fit	Acceptable fit	Problem-solving Skill	Emotional Intelligence	Classroom Management
$\chi^2/Sd$	$0 \leq \chi^2/Sd < 2$	$2 < \chi^2/Sd \leq 5$	3,31	2,96	3,98
RMSEA	$0 \leq RMSEA \leq .08$	$.08 < RMSEA \leq 1.00$	.104	.095	.118
CFI	$.95 \leq CFI \leq 1.0$	$.90 \leq CFI < .95$	.80	.64	.86
GFI	$.95 \leq GFI \leq 1.0$	$.90 \leq GFI < .95$	.69-	.67	.81
AGFI	$.90 \leq AGFI \leq 1.0$	$.85 \leq AGFI < .90$	.63-	.63	.74
RMR	$0 \leq RMR \leq .08$	$.08 < RMR \leq 1.00$	.14	.10	.03

Source: (Kline, 2005; Tabachnick and Fidell, 2012)

According to Table 1, the Confirmatory Factor Analyses of the research were also tested with participants consisting of 217 individuals. The fit indices of the three scales have been presented in order. In this context, especially when examining  $\chi^2/Sd$ , it is revealed that the scales exhibit good fit.

## **Data Analysis**

In the data analysis process, five values were initially excluded to form three values, ensuring data integrity and reducing potential noise in the analysis (Tabachnick & Fidell, 2019). The final dataset included 217 participants, providing a sufficiently large sample for mediation, moderation, and conditional effect analyses. These analyses were conducted using Hayes' PROCESS macro in SPSS, a widely recognized tool for examining complex relationships in social sciences (Hayes, 2022). The study employed Model 14 from Hayes' models, which accounts for moderated mediation effects, allowing for an interaction term to influence both the mediator and the outcome variable (Hayes, 2018). Given its robustness, Model 14 is appropriate for exploring the extent to which a mediator transmits the effect of an independent variable to a dependent variable while simultaneously being influenced by a moderator. This model provides a comprehensive understanding of the interaction between mediation and moderation effects. A 95% confidence interval was used with a Bootstrap sample of 5000, which enhances the accuracy and reliability of indirect effect estimates (Preacher & Hayes, 2008). The LLCI (Lower Confidence Interval) and ULCI (Upper Confidence Interval) were reported to assess the precision of the estimates, and unstandardized beta coefficients ( $b$ ) were used to interpret effect sizes. The significance threshold was set at  $p < .05$ , aligning with conventional statistical standards (Cohen, 1988). Furthermore, AMOS was utilized to assess model fit indices, ensuring that the proposed structural relationships were supported by empirical data. Key fit indices such as RMSEA, CFI, TLI, and SRMR were examined, with values being interpreted based on widely accepted benchmarks (Hu & Bentler, 1999; Kline, 2015).

## **Ethic**

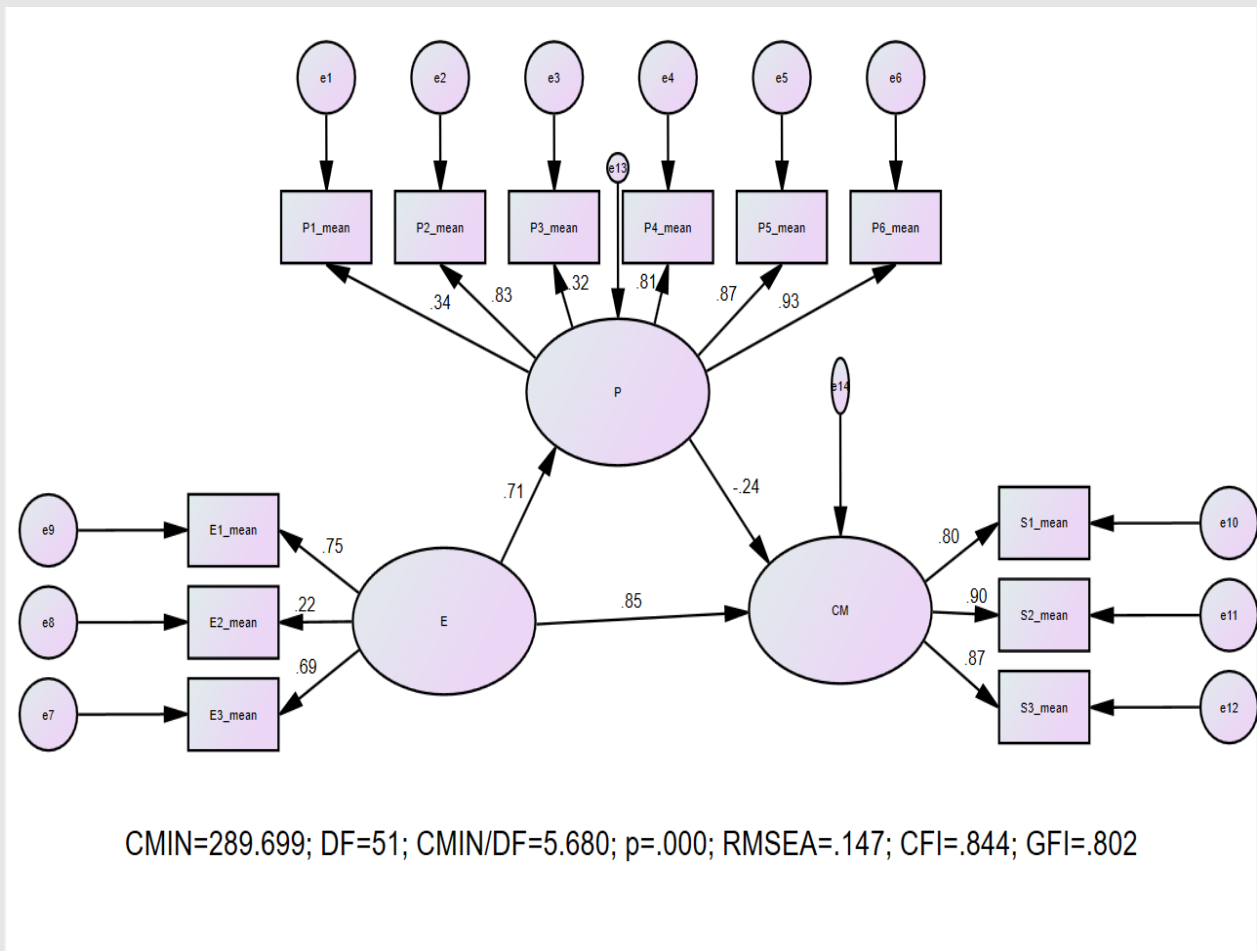
The ethics application for the study was made on 04/11/2024 and the research was carried out with the approval of Sinop University Human Research Ethics Commission dated 06/12/2024 and numbered 2024/351.

## Results

In this section, the conceptual framework of the research was first examined using structural equation modelling. Then, the hypotheses of the research were tested.

### Structural Equation Modelling

Below, in Figure 2, the basic model version of the conceptual model without covariance is presented.



*E=Emotional intelligence P= Problem solving skills CM= Classroom management*

Figure 2. Basic model

According to Figure 2, it is understood that the fit indices of the basic model are good. Moreover, the improved version of the model was also tested by creating covariance connections. Below, in Figure 3, the model with added covariance is presented.

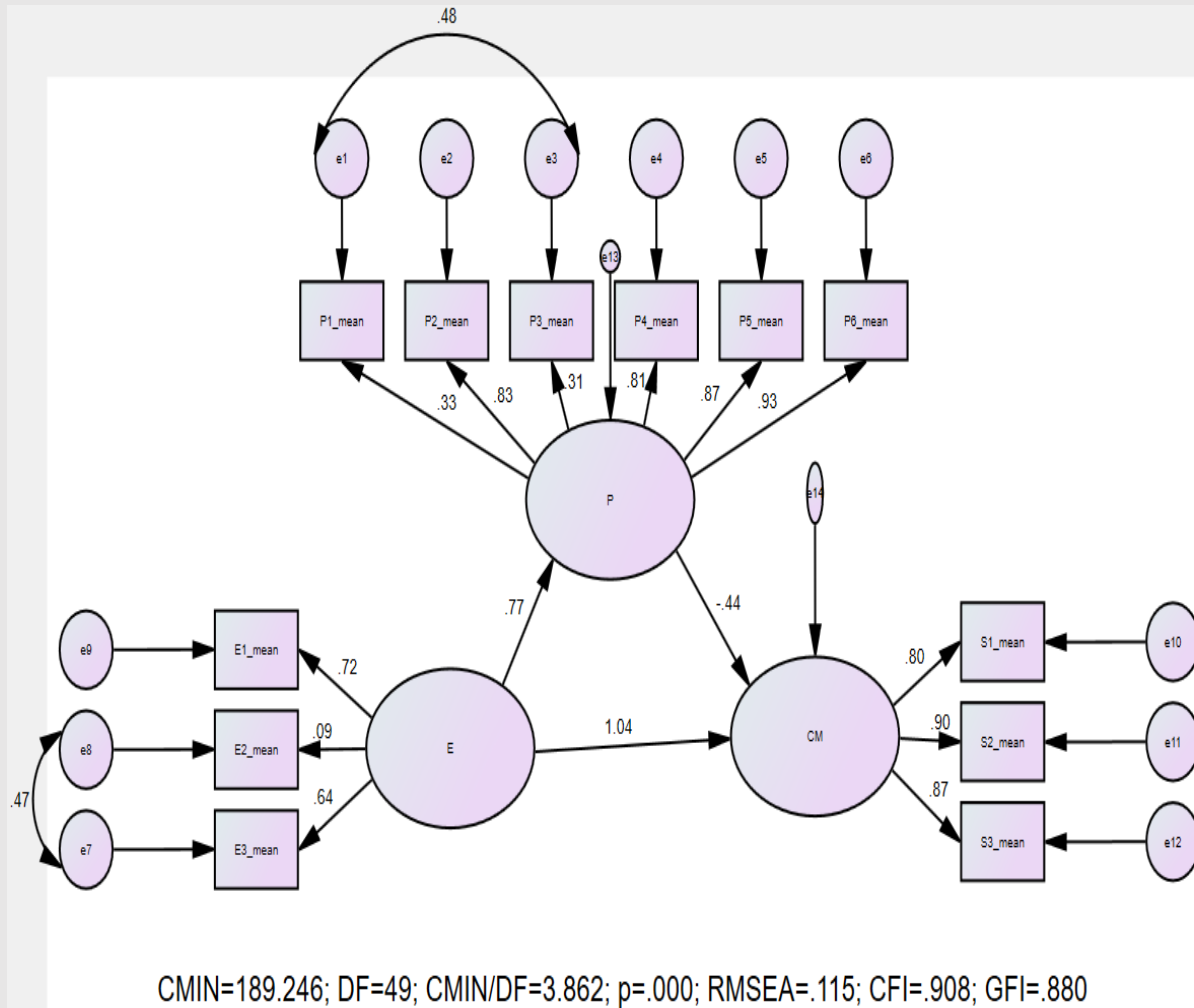


Figure 3. Covariance-adjusted model

When Figures 3 and 2 are evaluated together, it can be stated that the data is consistent with the theoretical model created based on the results of the confirmatory factor analysis of the model.

When the models with and without covariance in Figure 2 and 3 were evaluated together, two different Structural Equation Models (SEM) were compared. These are the model without covariance and the model with covariance. Common fit indices such as CMIN/DF, RMSEA, CFI and GFI were taken as reference when evaluating model fit (Kline, 2015; Hu & Bentler, 1999).

CMIN/DF value was found as 5.680 in the model without covariance and 3.862 in the model with covariance. In the related literature, values  $\leq 3$  are accepted as good fit, 3-5 as moderate fit, and  $> 5$  as poor fit (Kline, 2015). It has been found that the model without covariance shows poor fit, but it improves to moderate level with the addition of covariance. RMSEA is an significant fit criterion representing the error level of the model. It was calculated as 0.147 in the model without covariance and 0.115 in the model with covariance.  $RMSEA \leq 0.05$  is considered as

perfect fit,  $\leq 0.08$  as acceptable fit and  $> 0.10$  as poor fit (Browne & Cudeck, 1993). CFI is required to be  $\geq 0.95$  for a perfect fit and  $\geq 0.90$  for an acceptable fit (Bentler, 1990; Hu & Bentler, 1999). It was calculated as 0.844 in the model without covariance and 0.908 in the model with covariance. GFI  $\geq 0.90$  indicates that the model shows good fit (Jöreskog & Sörbom, 1993). It was calculated as 0.802 in the model without covariance and 0.880 in the model with covariance. The covariance-added model showed improvement in all fit indices.

**H<sub>1</sub>: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and classroom management levels is moderated by being a social studies teacher. (Hayes Model 14)**

Table 2. The indirect effect of problem-solving skills on classroom management bootstrap regression analysis results (N= 217)

<i>Variables</i>	<i>Problem-solving Skill</i>			<i>Classroom Management</i>		
	<i>b</i>	LLCI	ULCI	<i>b</i>	LLCI	ULCI
Emotional Intelligence (X)	-	-	-	.4867*	.3115	.6618
Problem-solving skill (M)	-	-	-	.5338*	.1786	.8890
Social Studies Teacher (W)	-	-	-	1.1411*	.1935	2.0886
M*W (Interaction)	-	-	-	-.2531*	-.4575	-.0487
<i>R<sup>2</sup></i>					.304	
<i>Indirect Affect</i>	<i>b</i>	LLCI	ULCI	-	-	-
Social Studies Teacher	.2407	.0741	.4806	-	-	-
Other Branch Teachers	.0236	-.1085	.1573	-	-	-
Situational mediation index	-.2171*	-.4505	-.0356	-	-	-

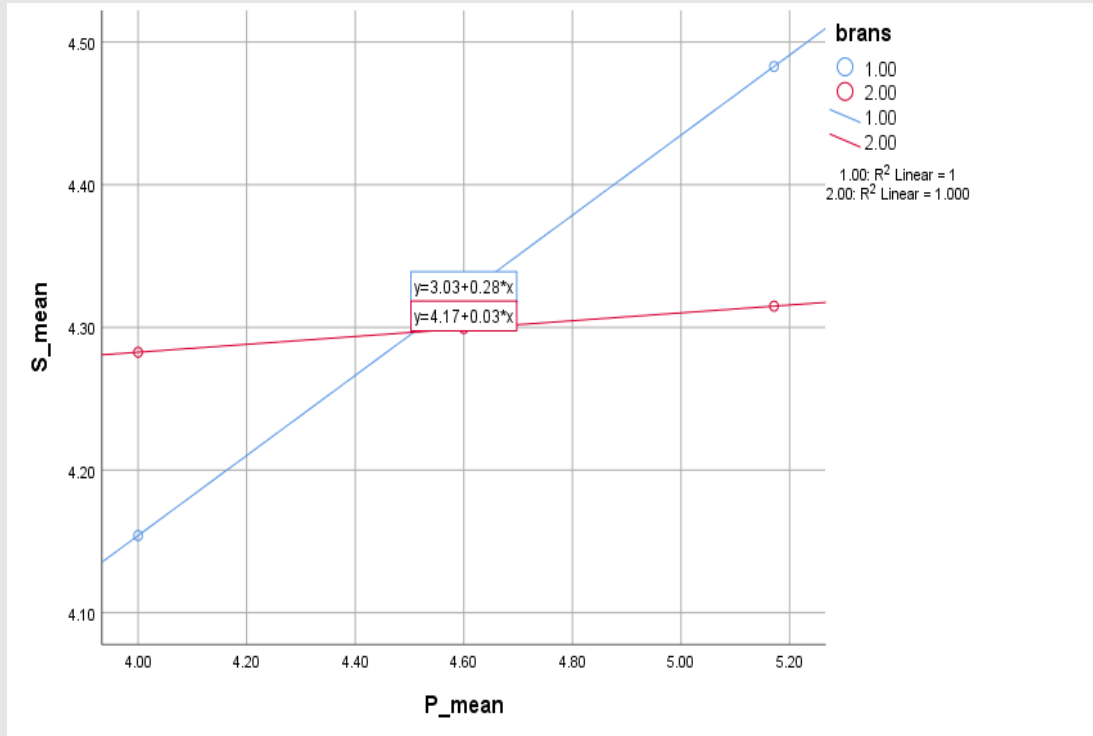
Note: \*  $p < .05$ ; LLCI= Lower confidence interval; ULCI= Upper confidence interval. Bootstrap resampling = 5000 Unstandardized beta coefficients (b) are reported.

The results of the regression analysis, which tested H<sub>1</sub> of the study by considering whether the teachers are social studies teachers as a situational moderator (moderated mediation), are given in Table 2. It is observed that all the predictor variables included in the regression analysis explain approximately 30% of the variance in classroom management skills ( $R^2 = .304$ ).

Initially, the effects of being a social studies teacher on the impact of problem-solving skills on classroom management skills were investigated. When looking at the confidence interval values obtained using the bootstrap technique, it is observed that the effect of problem-solving skills on classroom management is significant for those who are social studies teachers ( $b = .2407$ , 95% CI [.0741, .4806]), yet the effect of problem-solving skills on classroom management is not significant for those who are not social studies teachers ( $b = .0236$ , 95% CI [-.1085, .1573]).

Then, the dependence of the indirect effect of emotional intelligence (X) on classroom management skills (Y) through the mediating variable (problem-solving skills, M) on whether or not one is a social studies teacher (situational mediation role) was tested. The slope analysis conducted with the results in the table and the situational mediation effect are presented graphically in Figure 1.





1=Social Studies Teacher 2= Other Branch Teachers

Graphic 1. Situational mediation effect (Emotional Intelligence→Problem-solving Skill→Classroom Management)

According to Graph 1, the value of the index of moderated mediation ( $b = -.2171$ , 95% CI  $[-.4505, -.0356]$ ) is found to be significant. It has been determined that the condition of being or not being a social studies teacher acts as a moderating variable in the indirect effect of teachers' emotional intelligence levels on classroom management skills through problem-solving skills. In other words, the indirect effect of problem-solving on classroom management is strengthened when the teacher is a social studies teacher. According to the bootstrap results, the  $H_1$  hypothesis was accepted as the situational mediation index was significant.

**H<sub>2</sub>: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the planning-programming activities and physical arrangement dimensions of classroom management is moderated by being a social studies teacher. (Hayes Model 14)**

Table 3. The indirect effect of problem-solving skills on planned and programmed activities bootstrap regression analysis results (N= 217)

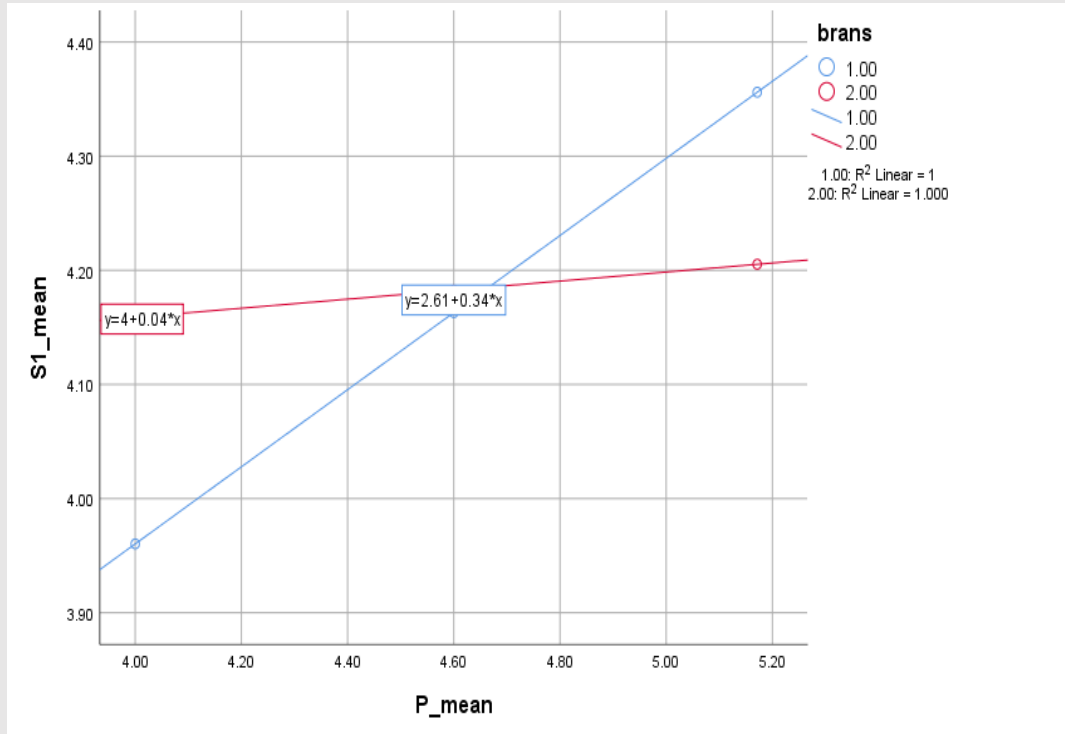
<i>Variables</i>	<i>Problem-solving Skill</i>			<i>Planned- Programmed Activities</i>		
	<i>b</i>	LLCI	ULCI	<i>b</i>	LLCI	ULCI
Emotional Intelligence (X)	-	-	-	.4317*	.2441	.6193
Problem-solving Skill (M)	-	-	-	.6359*	.2554	1.0164
Social Studies Teacher (W)	-	-	-	1.3911*	.3761	2.4061
M*W (Interaction)	-	-	-	-.2981*	-.5171	-.0792
<i>R<sup>2</sup></i>					.268	
<i>Indirect affect</i>	<i>b</i>	LLCI	ULCI	-	-	-
Social Studies Teacher	.2897	.0960	.5486	-	-	-
Other Branch Teachers	.0340	-.1091	.1727	-	-	-
Situational Mediation Index	-.2557*	-.5113	-.0582	-	-	-

Note: \*p<.05; LLCI= Lower confidence interval; ULCI= Upper confidence interval. Bootstrap resampling = 5000 Unstandardized beta coefficients (b) are reported.

The results of the regression analysis, which served as a situational moderator (moderated mediation) to test H<sub>2</sub> of the research regarding whether the teachers are social studies teachers or not, are given in Table 3. It is observed that all the predictor variables included in the regression analysis explain approximately 27% of the variance in planned and programmed activities, which is a sub-dimension of classroom management skills (R<sup>2</sup> = .268).

First, the effects of being a social studies teacher on the impact of problem-solving skills on planned and programmed activities were examined. Regarding the confidence interval values obtained using the bootstrap technique, it is observed that the effect of problem-solving skills on planned and programmed activities is significant for those who are social studies teachers (b= .2897, 95% CI [.0960, .5486]), while the effect of problem-solving skills on planned and programmed activities is not significant for those who are not social studies teachers (b= .0340, 95% CI [-.1091, .1727]).

The dependence of the indirect effect of emotional intelligence (X) on planned and programmed activities (Y) through the mediating variable (problem-solving skills, M) on whether one is a social studies teacher (whether there is a situational mediation role) was tested. The slope analysis conducted with the results presented in the table shows the situational mediation effect graphically in Graphic 2.



Graphic 2. Situational mediation effect (Emotional Intelligence→Problem-solving Skill→ Planned-Programmed Activities)

According to Graph 2, the value of the index of moderated mediation ( $b = -.2557$ , 95% CI  $[-.5113, -.0582]$ ) is found to be significant. It has been determined that the condition of being or not being a social studies teacher acts as a moderating variable in the indirect effect of teachers' emotional intelligence levels on the planned and programmed activities skill, which is a sub-dimension of classroom management, through problem-solving skills. In other words, the indirect effect of problem-solving on the planned and programmed activities dimension of classroom management is strengthened when the teacher is a social studies teacher. According to the bootstrap results, the  $H_2$  hypothesis was accepted on the grounds that the situational mediation index was significant.

**H<sub>3</sub>: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the teacher-student relationships and time management dimensions of classroom management is moderated by being a social studies teacher. (Hayes Model 14)**

Table 4. The indirect effect of problem-solving skills on teacher-student relationships bootstrap regression analysis results (N= 217)

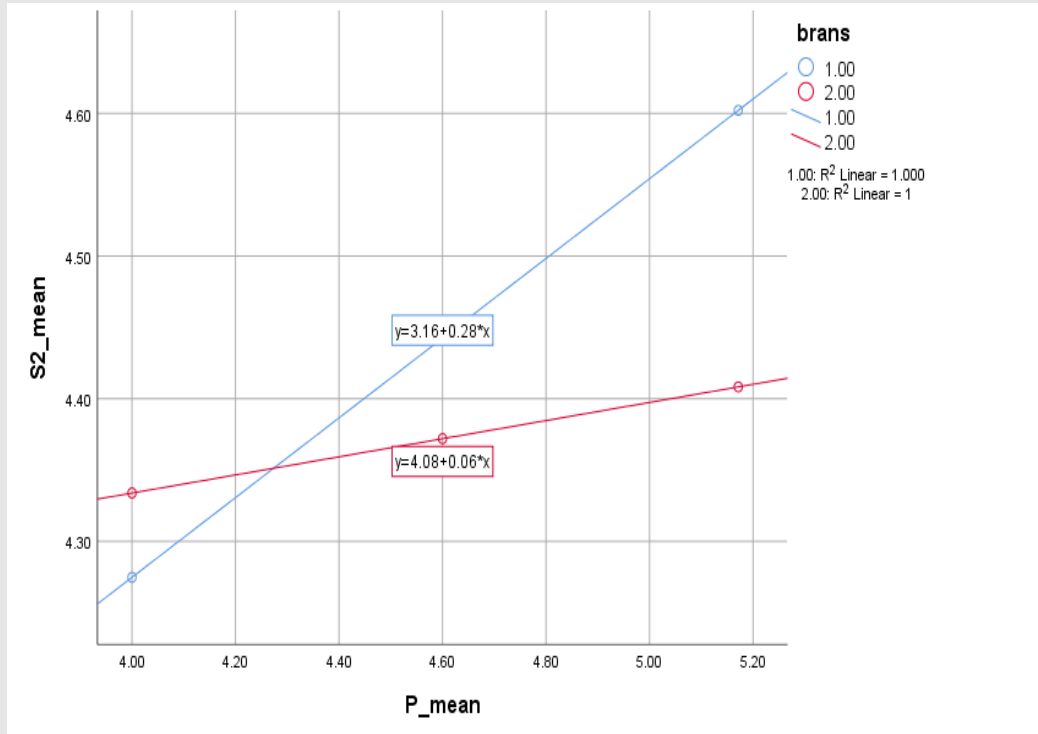
<i>Variables</i>	<i>Problem-solving Skill</i>			<i>Teacher-Student Relationship</i>		
	<i>b</i>	LLCI	ULCI	<i>b</i>	LLCI	ULCI
Emotional Intelligence (X)	-	-	-	.4810*	.2861	.6760
Problem-solving Skill (M)	-	-	-	.4953*	.0999	.8906
Social Studies Teacher (W)	-	-	-	.9226	-.1321	1.9773
M*W (Interaction)	-	-	-	-.2159	-.4434	.0116
<i>R<sup>2</sup></i>					.270	
<i>Indirect Effect</i>	<i>b</i>	LLCI	ULCI	-	-	-
Social Studies Teacher	.2396	.0530	.5141	-	-	-
Other Branch Teachers	.0545	-.0926	.2246	-	-	-
Situational Mediation Index	-.1852*	-.4535	-.0309	-	-	-

Note: \*p<.05; LLCI= Lower confidence interval; ULCI= Upper confidence interval. Bootstrap resampling = 5000 Unstandardized beta coefficients (b) are reported.

With the purpose of testing H<sub>3</sub> of the study, the results of the regression analysis in which whether teachers are social studies teachers or not is a moderated mediator are presented in Table 4. It is seen that all predictor variables included in the regression analysis explained approximately 27% (R<sup>2</sup> = .270) of the variation on teacher-student relationships, which is the sub-dimension of classroom management skills.

In the initial phase, the effects of being a social studies teacher or not on the effect of problem-solving skills on teacher-student relationships were examined. When the confidence intervals obtained with the bootstrap technique are considered, it has been found that the effect of problem-solving skills of social studies teachers on teacher-student relationships is significant (b= .2396, 95% CI [.0530, .5141]), yet the effect of problem-solving skills of those who are not social studies teachers on teacher-student relationships is not significant (b= .0545, 95% CI [-.0926, .2244]).

Then, it was tested whether the indirect effect of emotional intelligence (X) on teacher-student relationships (Y) through the mediating variable (problem solving skill, M) has a moderated mediating role in terms of the status of being a social studies teacher or not. The results in the table and the slope analysis and the moderated mediation effect are given in Graphic 3.



Graphic 3. Moderated mediation effect (Emotional Intelligence→Problem-solving Skill→ Teacher-Student Relationships)

Based on Graph 3, it is concluded that the Index of moderated mediation value is significant ( $b = -.1852$ , 95% CI  $[-.4535, -.0309]$ ). The status of being or not being a social studies teacher was found to be a moderating variable in the indirect effect of teachers' emotional intelligence levels on teacher-student relationships, which is a sub-dimension of classroom management, through problem solving skills. Namely, the indirect effect of problem solving on teacher-student relationships of classroom management is stronger in the case that the teacher is a social studies teacher. According to the bootstrap results,  $H_3$  was accepted since the moderated mediation index was significant.

**H4: The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the classroom interaction and behavior regulation dimensions of classroom management is moderated by being a social studies teacher. (Hayes Model 14)**

Table 5. The bootstrap regression analysis results of the indirect effect of problem-solving skills on classroom interaction and behaviour (N= 217)

<i>Variables</i>	<i>Problem-solving Skill</i>			<i>Classroom Interaction and Behaviour</i>		
	<i>b</i>	LLCI	ULCI	<i>b</i>	LLCI	ULCI
Emotional Intelligence (X)	-	-	-	.5761*	.3500	.8022
Problem-solving Skill (M)	-	-	-	.4288	-.0297	.8873
Social Studies Teacher (W)	-	-	-	1.0391	-.1840	2.2622
M*W (Interaction)	-	-	-	-.2321*	.4960	.0317
<i>R</i> <sup>2</sup>					.213	
<i>Indirect Effect</i>	<i>b</i>	LLCI	ULCI	-	-	-
Social Studies Teacher	.1687	-.0030	.4282	-	-	-
Other Branch Teachers	-.0304	-.1907	.1332	-	-	-
Moderated Mediation Effect	-.1991	-.4761	.0278	-	-	-

*Note:* \*  $p < .05$ ; LLCI= Lower confidence interval; ULCI= Upper confidence interval. Bootstrap resampling=5000 Unstandardised beta coefficients (b) are reported.

In order to test H<sub>4</sub> of the current study, the results of the regression analysis regarding to the fact that teachers are social studies teachers or not is a moderated mediator are given in Table 5. It has been revealed that all prediction variables included in the regression analysis explain approximately 21% ( $R^2 = .213$ ) of the change in classroom interaction and behaviour, which is the sub-dimension of classroom management skills.

In the first phase, the effects of being a social studies teacher or not on the effect of problem solving skills on classroom interaction and behaviour skills were examined. Considering the confidence intervals obtained with the bootstrap technique, it has been demonstrated that the effect of problem-solving skills of social studies teachers on classroom interaction and behaviour is not significant ( $b = .1687$ , 95% CI [.0030, .4282]). Likewise, the effect of problem-solving skills of non-social studies teachers on classroom interaction and behaviour was found insignificant ( $b = -.0304$ , 95% CI [-.1907, .1332]). In addition, it was investigated whether the indirect effect of emotional intelligence (X) on classroom interaction and behaviour (Y) through the mediating variable (problem-solving skill, M) has a moderated mediation role on being a social studies teacher or not. It is understood that the index of moderated mediation value is not significant ( $b = -.1991$ , 95% CI [-.4761, .0278]). It was unveiled that being or not being a social studies teacher was not a moderating variable in the indirect effect of teachers' emotional intelligence levels on classroom interaction and behaviour, which are the sub-dimensions of classroom management through problem-solving skills. According to the bootstrap results, since the situational mediation index was not significant, *H<sub>4</sub> was rejected*.



## Acceptance and Rejection Status of Hypotheses

Table 6. Acceptance and rejection status of hypotheses

Hypotheses	Status
H <sub>1</sub> : The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and classroom management levels is moderated by being a social studies teacher.	Accepted
H <sub>2</sub> : The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the planning-programming activities and physical arrangement dimensions of classroom management is moderated by being a social studies teacher.	Accepted
H <sub>3</sub> : The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the teacher-student relationships and time management dimensions of classroom management is moderated by being a social studies teacher.	Accepted
H <sub>4</sub> : The indirect effect of teachers' problem-solving skills on the relationship between their emotional intelligence levels and the classroom interaction and behavior regulation dimensions of classroom management is moderated by being a social studies teacher.	Rejected

As seen in Table 6, 3 out of the 4 hypotheses included in the study have been accepted.

## Discussion and Conclusion

Depending on the research findings, it has been observed that all the predictor variables included in the regression analysis explain approximately 30% ( $R^2 = .304$ ) of the variation in classroom management skills. In other words, the indirect effect of problem-solving on classroom management is strengthened when the teacher is a social studies teacher.

It has been seen that the indirect effect of problem-solving on the sub-dimensions of classroom management skills, such as planned and programmed activities, teacher-student relationships, and classroom interaction and behaviour, increases in the presence of a social studies teacher. It was found that all the predictor variables included in the regression analysis explained approximately 27% ( $R^2 = .268$ ) of the variation in planned and programmed activities in classroom management. Thus, the indirect effect of problem-solving on the planned activities of classroom management is strengthened when the teacher is a social studies teacher.

The findings of this research are consistent with the existing literature on the relationships between emotional intelligence, problem-solving skills, and classroom management (Agbaria, 2021; Karagözoğlu, 2016; Kelley, 2018; Saeedi & Pahlavani, 2018; Valente et al., 2019). Specifically, it has been found that teachers with high levels of emotional intelligence are more successful in classroom discipline management (Hamidi & Khatip, 2016; Valente et al., 2019) and student relationships, and they also positively affect the classroom environment (Agbaria, 2021; Kazi & Laskar, 2024; Kelley, 2018; Saeedi & Pahlavani, 2018).

In the study, it was found that the relationships between social studies teachers' emotional intelligence and problem-solving skills and classroom management were stronger. This finding aligns with Karagözoğlu's (2016) study on social studies teachers.

In Koutrouba's (2020) study, it is stated that effective classroom management reflects the multifaceted abilities of teachers and has positive effects on student achievement. Sabetra and Aziz (2021) highlight the importance of lesson planning in classroom management and report that well-prepared lesson plans allow teachers to manage the classroom more effectively. In this regard, it is noted that teachers are required to develop an approach to planning in classroom management strategies and at the same time, problem solving skills should be used functionally. Besides, teachers are to anticipate potential problems and generate solutions while managing classroom dynamics and student behaviours. The integration of both classroom management and problem-solving skills at the planning stage has emerged as an important theme in both studies. Therefore, it can be said that there is a strong relationship between both studies.

In a similar vein, an indirect effect of problem-solving has been found in the teacher-student relationships sub-dimension of classroom management skills. It is observed that all the predictor variables included in the regression analysis explain approximately 27% ( $R^2 = .270$ ) of the variation in teacher-student relationships. In other words, the indirect effect of problem-solving on classroom management's impact on teacher-student relationships is stronger when the teacher is a social studies teacher. Social studies teachers' mindfulness levels strongly correlate with their problem solving skills. As mindfulness increases, teachers' classroom management and problem solving competences improve and they are able to produce more creative and effective solutions. This enables teachers to be more focused, flexible and sensitive to student needs (Al-Refai, 2021; Güleç, 2020). These findings show that teachers adopt a conscious method in problem solving processes.

The results of the related literature have also been seen to coincide with the research results. To cite an example, the finding in Chamizo-Nieto et al. (2021) study that emotional intelligence and problem-solving skills nourish each other and have the potential to foster students' academic achievement underlines the teacher-student relationship as an important factor as a tool that supports these processes. Therefore, both analyses provide similar conclusions on how emotional intelligence and problem-solving skills play vital roles to enhance academic achievement. Strong and supportive relationships between teachers and students play a pivotal role in enhancing students' motivation towards learning by affecting their academic achievement in a positive way. A strong teacher-student relationship in classroom management contributes to increasing students' academic achievement; in addition, mutual respect, supportive communication and trust are critical factors in this process (Fan, 2012; Ifesinachi et al., 2024; Shermukhamedovna, 2024).

At the end of the research, the change in classroom interaction and behaviour explains approximately 21% of the variance in the predictor variables ( $R^2 = .213$ ). It has been found that being or not being a social studies teacher is not a moderating variable in the indirect effect of teachers' emotional intelligence levels on classroom management sub-dimensions, specifically classroom interaction and behavior, through problem-solving skills.

Given all these results along with the body of related literature, it is indicated that emotional intelligence is an effective variable on classroom management. Furthermore, the effect of problem-solving on classroom management is also significant. When the results of the literature are examined, it is supported by Deniz's (2013) findings that emotional intelligence levels of pre-service teachers contribute to their adoption of more effective problem-solving strategies. In addition, Rawian (2018) stated that teachers' ability to manage emotional needs is an important factor in reducing classroom behaviour problems and supporting the learning process. In the

present study, this relationship was observed particularly in the sub-dimensions of planned programmed activities and teacher-student relationships. Asiyai (2011); Valente et al. (2020) revealed that teachers with the skills of perceiving, expressing and managing emotions exhibit more effective classroom management and teaching competence. The findings of this study support the positive relationship between emotional intelligence and effective classroom management and teaching. In the study, it was observed that teachers with high levels of emotional intelligence were more effective in classroom management and had a stronger bond with students. Jeyapriya and Jayachithra (2024) emphasized that problem-solving skills is fundamental in dealing with complex situations in the classroom and creating a positive learning setting. The indirect effect of problem-solving skills on different sub-dimensions of classroom management aligns with this view. The improvement of problem-solving skills may increase teachers' effectiveness in classroom management and have positive effects on students' learning outcomes and academic achievement. This result corresponds with the finding revealed by Mustafa et al. (2024) that the evaluation of emotional intelligence and problem-solving skills together leads to positive results in classroom management.

Based on the research findings, the following recommendations can be made:

- Teachers' awareness towards students' feelings in classroom management can enable them to make more conscious and effective decisions in solving the problems that might be encountered.
- Teachers can be encouraged to participate in professional development programmes to foster their emotional awareness and strengthen their self-regulation skills.
- Applied workshops can be organised where they can practice in-class conflict management and coping with stress.
- The regulatory role of being a social studies teacher can be tested for different subjects to achieve more comprehensive results.
- To more clearly demonstrate the impact of problem-solving skills on emotional intelligence and classroom management, experimental or quasi-experimental research can be conducted. The development of these skills can contribute to the determination of strategies that can be integrated into teacher training processes in accordance with the findings obtained by observing their reflections in the classroom environment.
- The effects of demographic variables such as gender, age, and professional seniority on problem-solving skills, emotional intelligence, and classroom management skills can be examined in depth.

### **Limitations**

The research has been limited to teachers working in state schools affiliated with the Ministry of National Education in Türkiye.

### **Declaration of Conflicting Interests**

There is no conflict of interest for the study. The author conducted the study alone.

### **Funding**

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sector.

### **Ethic**

The ethics application for the study was made on 04/11/2024 and the research was carried out with the approval of Sinop University Human Research Ethics Commission dated 06/12/2024 and numbered 2024/351.

## References

- Agbaria, Q. (2021). Classroom Management Skills among Kindergarten Teachers as Related to Emotional Intelligence and Self-Efficacy. *International Journal of Instruction*, 14(1), 1019-1034. <https://doi.org/10.29333/iji.2021.14160a>
- Akyol, M. A., & Akdemir, E. (2019). Comparison of Emotional Intelligence Levels and Problem Solving Skills of Prospective Teachers According to Different Variables. *World Journal of Education*, 9(3), 131-141. <https://doi.org/10.5430/wje.v9n3p131>
- Al-Refai, A. (2021). Mindfulness of Social Studies' Teachers and Its Relationship to Their Skills of Solving Classroom Problems. *Jordan Journal of Educational Sciences*, 17(3), 475-491. <https://doi.org/10.47015/17.3.10>
- Ariapooran, S., & Etemadi, H. (2020). Relationship between Classroom Management through the Social and Emotional Learning and Teacher-Student Interaction with Emotional Literacy in Elementary Students. *Research in Teaching*, 8(1), 79-59.
- Asiyai, R. I. (2011). Effective classroom management techniques for secondary schools. *African Research Review*, 5(1). <https://doi.org/10.4314/afrr.v5i1.64526>
- Austin, E. J., Saklofske, D. H., Huang, S. H. S., & McKenney, D. (2004). Measurement of trait emotional intelligence: Testing and cross-validating a modified version of Schutte et al.'s (1998) measure. *Personality and Individual Differences*, 36(3), 555-562. [https://doi.org/10.1016/S0191-8869\(03\)00114-4](https://doi.org/10.1016/S0191-8869(03)00114-4)
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238.
- Brackett, M. A., & Katulak, N. A. (2013). Emotional intelligence in the classroom: Skill-based training for teachers and students. In *Applying emotional intelligence* (pp. 1-27). Psychology Press. <https://doi.org/10.1093/obo/9780199828340-0047>
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. *Sage Focus Editions*, 154, 136-162.
- Büyükoztürk, Ş., Çakmak, E., K., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2009). Bilimsel araştırma yöntemleri. Ankara: Pegem Akademi.
- Chamizo-Nieto, M. T., Arrivillaga, C., Rey, L., & Extremera, N. (2021). The role of emotional intelligence, the teacher-student relationship, and flourishing on academic performance in adolescents: a moderated mediation study. *Frontiers in psychology*, 12, 695067. <https://doi.org/10.3389/fpsyg.2021.695067>
- Chathurika, P., (2017). Effective teaching practices of teaching environment related activities in primary level in Sri Lanka, *International Journal of Management and Applied Science*, 3 (9), 12-18.
- Ciarrochi, J., Forgas, J. P., & Mayer, J. D. (Eds.). (2006). *Emotional intelligence in everyday life*. Psychology press.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Routledge.

- Corcoran, R. P., & Tormey, R. (2012). How emotionally intelligent are pre-service teachers? *Teaching and Teacher Education*, 28(5), 750–759. <https://doi.org/10.1016/j.tate.2012.02.007>
- D'Ambrosio, M. (2002). Emotional intelligence in the classroom. *Academic Exchange Quarterly*, 6(2), 46-52.
- Delceva–Dizdarevik, J. (2014). Classroom management. *International Journal of Cognitive Research in Science, Engineering and Education*, 2(1), 51.
- Deniz, S. (2013). The relationship between emotional intelligence and problem solving skills in prospective teachers. *Educational Research and Reviews*, 8(24), 2339.
- Devi, K. R. P. (2016). Role of problem solving ability on enhancing students' achievement. *Indian J. Res*, 5, 238-240.
- Di, H., Lun, Y., & Zhang, B. (2024). The relationship between kindergarten teachers' emotional intelligence and classroom management ability: An investigative study with latent profile analysis. <https://doi.org/10.21203/rs.3.rs-4016900/v1>
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405–432. <https://doi.org/10.1111/j.1467-8624.2010.01564.x>
- Dustova, G., & Cotton, S. (2015). Classroom management strategies. *The CTE Journal*, 3(2), 32.
- Dzafic, M., & Ilic, M. (2024). Emotional intelligence in teaching and learning. *Research in Pedagogy*, 14(1), 62-73. <https://doi.org/10.5937/IstrPed2401062D>
- Emmer, E. T., & Stough, L. M. (2001). Classroom management: A critical part of educational psychology, with implications for teacher education. *Educational Psychologist*, 36(2), 103–112. [https://doi.org/10.1207/S15326985EP3602\\_5](https://doi.org/10.1207/S15326985EP3602_5)
- Ergin, D. Y. (2019). Developing the Scale of Classroom Management Skills. *Journal of Education and Training Studies*, 7(4), 250-258. <https://doi.org/10.11114/jets.v7i4.4024>
- Fan, F. A. (2012). Teacher: students' interpersonal relationships and students' academic achievements in social studies. *Teachers and teaching*, 18(4), 483-490. <https://doi.org/10.1080/13540602.2012.696048>
- Field, A. (2009). *Discovering statistics using Spss*(3rd.ed.). London: Sage publications.
- Franklin, H., & Harrington, I. (2019). A review into effective classroom management and strategies for student engagement: Teacher and student roles in today's classrooms. *Journal of Education and Training Studies*. <https://doi.org/10.11114/jets.v7i12.4491>
- George, D. & Mallery, P. (2010). *SPSS for windows step by step: A simple guide and reference, 17.0 update*. Boston: Allyn & Bacon.
- Göçet, E. (2006). *Üniversite öğrencilerinin duygusal zeka düzeyleri ile stresle başa çıkma tutumları arasındaki ilişki* [Yayımlanmamış Yüksek Lisans Tezi,]. Sakarya Üniversitesi.



- Güleç, S. (2020). Problem solving skills in social studies education and problem solving skills of social studies teachers. *Journal of Education and Training Studies*, 8(3), 48. <https://doi.org/10.11114/jets.v8i3.4686>
- Habsy, B. A., Azizah, N. H., Viola, N. P., & Mahendra, W. (2023). Peran guru dalam menciptakan lingkungan pembelajaran yang efektif dengan cara pengelolaan kelas yang menarik. *TSAQOFAH*, 4(2), 545-566. <https://doi.org/10.58578/tsaqofah.v4i2.2305>
- Hamidi, H., & Khatib, M. (2016). The interplay among emotional intelligence, classroom management, and language proficiency of Iranian EFL teachers. *BRAIN. Broad Research in Artificial Intelligence and Neuroscience*, 7(2), 49-58.
- Hans, A., & Hans, M. E. (2017). Classroom management is prerequisite for effective teaching. *International Journal of English and Education*, 6(2), 273-283.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.
- Hayes, A. F. (2022). *The PROCESS macro for SPSS, SAS, and R: A primer on mediation, moderation, and conditional process analysis* (3rd ed.). Guilford Press.
- Heppner, P.P. & Petersen, C.H. (1982). The development and implications of a personal problem solving inventory. *Journal of Conselling Psychology*, 29, 66- 75. <https://doi.org/10.1037/0022-0167.29.1.66>
- Hess, J. D., & Bacigalupo, A. C. (2014). Enhancing management problem-solving processes through the application of emotional intelligence skills. *Journal of Management Policies and Practices*, 2(3), 1-17. <https://doi.org/10.15640/jmpp.v2n3a1>
- Hindman, J. L., & Stronge, J. H. (2004). What effective teachers do: Professional characteristics and practices. *Teacher Education Quarterly*, 31(1), 101–113.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Ifesinachi, E. J., Dadzie, J., & Ocheni, A. C. (2024). Enhancing students'academic achievement in basic science: the role of assessment for learning, classroom management, and teacher-student relationships. *European Journal of Education Studies*, 11(5). <https://doi.org/10.46827/ejes.v11i5.5298>
- Iram, N. (2022). Effect of Teachers' Emotional Intelligence on School Climate at Secondary School Level. *Bulletin of Education and Research*, 44(3), 18-36.
- Jennings, P. A., & Greenberg, M. T. (2009). The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. Review of Educational Research, 79(1), 491–525. <https://doi.org/10.3102/0034654308325693>
- Jeyapriya, A. L., & Jayachithra, J. (2024). Life skills pertaining to teaching performance with special emphasis on problem-solving. *International Journal of Emerging Knowledge Studies*, 3 (7), 357-361.
- Jöreskog, K. G., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Scientific Software International.

- Kanesan, P., & Fauzan, N. (2019). Models of emotional intelligence: A review. *e-BANGI Journal*, 16(7).
- Karagözoğlu, N. (2016). Sosyal bilgiler öğretmenlerinin duygusal zeka yeterliklerini mesleğinde kullanma düzeyleri ile benimsedikleri sınıf yönetimi modelleri arasındaki ilişki. *The Journal of Academic Social Science*, 29(29), 269-287. <https://doi.org/10.16992/ASOS.1240>
- Karasar, N. (2009). Bilimsel araştırma yöntemi. 20. Baskı. Ankara: Nobel.
- Kazi, S., & Laskar, J. H. (2024). Integrating Emotional Intelligence and Professional Ethics in Classroom Problem-Solving Among Upper Primary Teachers, *An Online Peer Reviewed / Refereed Journal*, 2 (8), ISSN: 2583-973X (Online)
- Kelley, J. E. (2018). Teacher emotional intelligence and best practices for classroom management. *Dissertations*.
- Khansir, A. A., & Mirzaei, M. (2024). The Classroom Management in English Language Teaching. *Indian Journal of Language and Linguistics*, 5(2), 44-52. <https://doi.org/10.54392/ijll2424>
- Kline, P. (2005). *Psychometrics and psychology: A primer*. Routledge.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford Press.
- Koutrouba, K. (2020). Classroom Management and Teacher Effectiveness. *Oxford Research Encyclopedia of Education*.
- Kumar, N., Tandon, R., & Misra, N. (2022). Emotional Intelligence as Intangible Class Content for Effective Communication in Managing University Classes: A Bibliometrics Analysis. *J. Content Community Commun*, 16, 26-36. <https://doi.org/10.31620/JCCC.12.22/03>
- Kuntari, R. D., & Asmarany, A. I. (2024). The Relationship Between Emotional Intelligence and Problem Solving in SLB Teachers. *The Relationship Between Emotional Intelligence and Problem Solving in SLB Teachers*, 142(1), 6-6. <https://doi.org/10.47119/IJRP1001421220246051>
- Levin, J., & Nolan, J. F. (2023). *Sınıf yönetimi ilkeleri: Bir profesyonel karar verme modeli* (Cemaloğlu, N. & İhtiyaroğlu, N, Çev. Ed.). Palme Yayıncılık.
- Martinez, M. E. (1998). What Is Problem Solving? *The Phi Delta Kappan*, 79(8), 605-609. <http://www.jstor.org/stable/20439287>
- Marzano, R. J., & Marzano, J. S. (2003). The key to classroom management. *Educational leadership*, 61(1), 6-13.
- Mustafa, M. N., Hermendra, H., & Zulhafizh, Z. (2024). Classroom management through problem solving: teachers' strategies in realizing quality learning. In *Proceeding of The International Conference of Inovation, Science, Technology, Education, Children, and Health* (Vol. 4, No. 1, pp. 116-131).

- Nanyele, S., Kuranchie, A., & Owusu-Addo, A. (2018). Classroom management practices and student disruptive behavior. *Integrity Journal of Education and Training*, 2(2), 6-14. <https://doi.org/10.31248/IJET2018.021>
- Nurdin, S. (2024). Pengelolaan Kelas Dalam Pembelajaran Tematik di SD/MI. *Jurnal Arjuna: Publikasi Ilmu Pendidikan, Bahasa dan Matematika*, 2(3), 295-310. <https://doi.org/10.61132/arjuna.v2i3.985>
- Özen, H., & Yildirim, R. (2020). Teacher Perspectives on Classroom Management. *International Journal of Contemporary Educational Research*, 7(1), 99-113. <https://doi.org/10.33200/ijcer.645818>
- Packard, A. B. (2021). *Managing Emotions: Teachers Use of Emotional Intelligence* (Doctoral dissertation, Northeastern University). <https://doi.org/10.17760/D20412901>
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Rahimi, M., & Asadollahi, F. (2012). EFL teachers' classroom management orientations: Investigating the role of individual differences and contextual variables. *Procedia - Social and Behavioral Sciences*, 31, 43–50. <https://doi.org/10.1016/j.sbspro.2011.12.013>
- Rao, D. V. T. (2022). Role of emotional intelligence in classroom to improve teaching methods of teachers.
- Rawian, R. M. (2018). Emotional Intelligence in Classrooms. *SALTeL Journal (Southeast Asia Language Teaching and Learning)*, 1(2), 21-26. <https://doi.org/10.35307/saltel.v1i2.11>
- Roesler, R. A. (2017). Independence Pending: Teacher Behaviors Preceding Learner Problem Solving. *Journal of Research in Music Education*, 64(4), 454–473. <https://doi.org/10.1177/0022429416672858>
- Sabetra, F., & Aziz, I. (2021). The Component Of Lesson Plan On Classroom Management. *International Journal of Humanities Education and Social Sciences*, 1(3). <https://doi.org/10.55227/ijhess.v1i3.72>
- Saeedi, F., & Pahlavani, P. (2018). The Difference between predictability of Iranian EFL teachers' emotional intelligence and sense of plausibility with their sense of classroom management. *Journal of Modern Research in English Language Studies*, 5(1), 73-94.
- Savage, T. V., & Savage, M. K. (2009). *Successful classroom management and discipline: Teaching self-control and responsibility*. Sage.
- Schaubman, A., Stetson, E., & Plog, A. (2011). Reducing teacher stress by implementing collaborative problem solving in a school setting. *School Social Work Journal*, 35(2), 72-93.
- Schutte, N. S., Malouff, J. M., Hall, L. E., Haggerty, D. J., Cooper, J. T., Golden, C. J., & Dornheim, L. (1998). Development and validation of a measure of emotional intelligence. *Personality and Individual Differences*, 25(2), 167-177. [https://doi.org/10.1016/S0191-8869\(98\)00001-4](https://doi.org/10.1016/S0191-8869(98)00001-4)

- Shermukhamedovna, P. S. (2024). The Importance of Emotional Intelligence in Education: Nurturing Social and Emotional Learning in Students. *Pedagogical Cluster-Journal of Pedagogical Developments*, 2(2), 22-27.
- Sieberer-Nagler, K. (2016). Effective classroom-management & positive teaching. *English language teaching*, 9(1), 163-172. <https://doi.org/10.5539/elt.v9n1p163>
- Singh, A., Prabhakar, R., & Kiran, J. S. (2022). Emotional intelligence: A literature review of its Concept, models, and measures. *Journal of Positive School Psychology*, 6(10), 2254-2275.
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review*, 15(4), 327–358. <https://doi.org/10.1023/A:1026131715856>
- Şahin, N., Şahin, N. H., & Heppner, P. P. (1993). Psychometric properties of the problem solving inventory in a group of Turkish university students. *Cognitive Therapy and Research*, 17, 379-396. <https://doi.org/10.1007/BF01177661>
- Şevgin, H., & Eranıl, A. K. (2023). Investigation of teachers' classroom management and classroom measurement and evaluation competencies. *International Journal of Eurasian Education & Culture*, 8(23), 2319-2341. <https://doi.org/10.35826/ijoecc.791>
- Tabachnick, B. G., & Fidell, L. S. (2012). *Using multivariate statistics* (6th ed.). Pearson.
- Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.
- Valente, S., & Lourenço, A. A. (2020). Conflict in the classroom: How teachers' emotional intelligence influences conflict management. In *Frontiers in education* (Vol. 5, p. 5). Frontiers Media SA. <https://doi.org/10.3389/feduc.2020.00005>
- Valente, S., Lourenço, A. A., Alves, P., & Dominguez-Lara, S. (2020). The role of the teacher's emotional intelligence for efficacy and classroom management. *CES Psicología*, 13(2), 18-31. <https://doi.org/10.21615/cesp.13.2.2>
- Valente, S., Monteiro, A. P., & Lourenço, A. A. (2019). The relationship between teachers' emotional intelligence and classroom discipline management. *Psychology in the Schools*, 56(5), 741-750. <https://doi.org/10.1002/pits.22218>
- Valente, S., Veiga-Branco, A., Rebelo, H., Lourenço, A. A., & Cristóvão, A. M. (2020). The relationship between emotional intelligence ability and teacher efficacy. <https://doi.org/10.13189/ujer.2020.080324>
- Wang, L. (2022). Exploring the relationship among teacher emotional intelligence, work engagement, teacher self-efficacy, and student academic achievement: A moderated mediation model. *Frontiers in psychology*, 12, 810559. <https://doi.org/10.3389/fpsyg.2021.810559>
- Yalçinkaya, M., & Tonbul, Y. (2002). İlköğretim okulu sınıf öğretmenlerinin sınıf yönetimi becerilerine ilişkin algı ve gözlemler. *Ege Eğitim Dergisi*, 1(2), 1-10.
- Zafar, J. M., & Akhtar, M. S. (2023). Emotional Intelligence and Anxiety Handling in Secondary Grade Students by Classroom Managerial Style. *Academy of Education and Social Sciences Review*, 3(1), 22–31. <https://doi.org/10.48112/aessr.v3i1.399>