

2022

## Teachers' Emotion Regulation: Implications for Classroom Conflict Management

Sabina Valente

*Polytechnic Institute of Portalegre; Research Center in Education and Psychology, University of Évora; VALORIZA - Research Center for Endogenous Resource Valorization, Portugal*

Abílio Afonso Lourenço

*Alexandre Herculano School Group, Porto; University of Minho, Braga, Portugal*

Sergio Dominguez-Lara

*Universidad de San Martín de Porres, Lima, Perú*

Ali Derakhshan

*Department of English language and Literature, Faculty of Humanities and Social Sciences, Golestan University, Gorgan, Iran*

Zsolt Németh

*Faculty of Sciences, Institute of Sport Science and Physical Education, Department of Theory and Practice of Sports, University of Pécs, Pécs, Hungary*

Leando S. Almeida

*Institute of Education, University of Minho, Braga, Portugal*

Follow this and additional works at: <https://ro.ecu.edu.au/ajte>



Part of the [Higher Education and Teaching Commons](#)

---

### Recommended Citation

Valente, S., Lourenço, A. A., Dominguez-Lara, S., Derakhshan, A., Németh, Z., & S. Almeida, L. (2022). Teachers' Emotion Regulation: Implications for Classroom Conflict Management. *Australian Journal of Teacher Education*, 47(8).  
<http://dx.doi.org/10.14221/ajte.2022v47n8.2>

This Journal Article is posted at Research Online.  
<https://ro.ecu.edu.au/ajte/vol47/iss8/2>

## Teachers' Emotion Regulation: Implications for Classroom Conflict Management

Sabina Valente

Polytechnic Institute of Portalegre; Research Center in Education and Psychology; Research Center for Endogenous Resource Valorization, Portugal

Abílio Afonso Lourenço

University of Minho, Braga, Portugal

Sergio Dominguez-Lara

Universidad de San Martín de Porres, Lima, Perú

Ali Derakhshan

Golestan University, Gorgan, Iran

Zsolt Németh

University of Pécs, Pécs, Hungary

Leando S. Almeida

University of Minho, Braga, Portugal

*Abstract: It has been postulated that emotions play essential roles in conflict situations and that excessive expression of emotions or inappropriate display can reduce the capacity to manage conflict. However, there is a lack of research that relates teachers' emotion-regulation ability to managing conflict. To bridge this gap, this pilot study aimed to examine the relationships between teachers' emotion-regulation ability and conflict management strategies used in the classroom. The sample consisted of 878 teachers (61% women) working in Portuguese schools, which completed an application of Mayer and Salovey's emotional intelligence model and Rahim's model of conflict management. Using the structural equation modeling, findings revealed that the teachers who tend to show a greater ability to regulate emotions use mainly integrating and compromising strategies to manage classroom conflicts more frequently than other strategies. In conclusion, it is necessary to create a curriculum in the pre-service teachers' education programs that includes emotional education, so that they can acquire emotional regulation skills, due to their importance in classroom conflict management.*

**Keywords:** Emotion regulation ability, classroom conflict, teacher-student relationship, pre-service teacher training

### Introduction

Teaching is intrinsically an emotional activity (Savina et al., 2021), and emotional processes are evident in all classrooms (Valente et al., 2022). Research also indicates that classroom conflicts represent one of the most outstanding challenges that teachers currently experience in educational settings (Doğan, 2016). As put forward by Savina et al. (2021), teachers may experience disappointment with the lack of student's effort, and anxiety when

teacher competence is challenged (Savina et al., 2021). Teachers report that these emotions often arise from management classroom interactions (Fathi & Derakhshan, 2019; Greenier et al., 2021). They also believe that regulating emotions while teaching makes them more effective (Sutton et al., 2009). Thus, in teacher-student classroom relationships, the teacher often regulates his emotions.

Emotions have a direct impact on individual choices and the decision-making process (Hopkins & Yonker, 2015). Conflict management also includes both rational and emotional processes, with the latter having a priority role (Betancourt, 2004), since emotions are mediators of the behavior's cognitive process that is revealed in a conflict (Desivilya & Yagil, 2005). It is important to note that emotions have different impacts on conflict situations. Excessive expression of emotions or inappropriate display reduces the capacity to manage conflict and hurts the efficacy of its resolution (Hopkins & Yonker, 2015). Besides, conflicts are emotionally conceived and are part of every classroom (Valente et al., 2020); they are described by strong emotions (e.g., anger, sadness), and those emotions debilitate teachers' performance (Göksoy & Argon, 2016).

However, there is a lack of research linking teachers' psychological resources with classroom conflict management (Rispen & Demerouti, 2016). Accordingly, the main impetus for this study was inspired by the following research question: What is the influence of teachers' emotion regulation on conflict management in the classroom? Furthermore, little is known about the role of teachers' emotional skills in classroom conflict management (European Commission, 2013; Morris-Rothschild & Brassard, 2006; Valente & Lourenço, 2020a). To bridge the mentioned gaps, this study aimed to investigate how teachers' emotion-regulation abilities (ERA) influences classroom conflict management. This study contributes to knowledge about the influence of teachers' psychological resources (e.g., emotional regulation) on the decisions to use different strategies to manage conflict in the classroom and benefits the reflection on the integration of emotional skills in the pre-service teachers' training as essential skills for teaching practice.

## Teachers' Emotion Regulation

Mauss et al. (2005) emphasize that emotions have multiple components, consisting of a more or less coherent cluster of valence-related behavioral and physiological responses that are accompanied by specific thoughts and feelings. In this respect, Salovey and Mayer (1990) also note that emotions are "organised responses, crossing the boundaries of many psychological subsystems, including the physiological, cognitive, motivational, and experiential systems" (p. 186). As Mayer et al. (2011) mentioned, emotions are recognised as "one of three or four fundamental classes of mental operations" (p. 530).

One construct that is linked to emotional regulation is emotional intelligence (EI), which is defined as "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (Mayer & Salovey, 1997, p. 10). So, the ability to perceive emotion is the most basic, and the ERA is the most advanced and complex and considered to be of a higher level, being the most complex ability, and to achieve it, it is necessary to master the previous EI abilities (Mayer et al., 2016). In other words, emotionally intelligent individuals use reason to understand emotions (their own and others') and resort to emotions to interpret the environment and make more rational decisions in their daily lives. Thus, emotion makes thinking smarter, and intelligence allows you to think and use emotions more accurately, through regulation and emotional control (Mayer & Salovey, 1997). Also,

EI definition suggests that one of the key aspects of EI is the ability to successfully regulate emotions.

According to Mayer and Salovey's (1997) EI model, ERA is the ability to regulate the emotional states of oneself and others to promote emotional and intellectual growth, integrating emotion and cognition. Since emotion regulation operates on people's emotions, the effects of this regulation can be observed across all modalities of emotional responding, including behavior, physiology, thoughts, and feelings (Koole, 2009). It should be noted that the ERA is also the most important ability associated with the workplace (Joseph & Newman, 2010) since it implies knowing how to moderate and manage emotional reactions in the face of positive or negative situations and how to select and apply appropriate emotional regulation strategies (Mayer & Salovey, 1997).

Teaching is a demanding enterprise (Savina et al., 2021), and emotional processes are evident in the classroom (Valente et al., 2022), where interpersonal relationships can generate beneficial development (Pishghadam et al., 2021; Xie & Derakhshan, 2021) as well as the emotional weariness of teachers and students (Valente & Lourenço, 2020a).

Research shows that teachers' negative emotions are aroused by various triggers, like frustration, a result of tackling the unexpected behavior of turbulent students (Littleton, 2018), or when students cannot grasp a concept; anger with students' misbehavior, disappointment with the lack of effort; and anxiety when teacher competence is challenged (Savina et al., 2021). However, in the classroom environment, teachers have to regulate their emotions whether they are positive (e.g., enthusiasm) to communicate with students in a balanced tone, or negative (e.g., anger) in the presence of students' infractions during class (Sutton et al., 2009). Given the fact that teachers frequently have to manage many emotional situations in classroom contexts, teaching requires hard emotional work (Valente et al., 2022).

Another crucial point that should be highlighted is that teachers' emotions have a strong impact on learning: positive emotions can arouse students' engagement and promote the acquisition of academic skills, while negative emotions can distract students from learning (Mora, 2021). However, confrontation with students and loss of authority in the classrooms force teachers to restrict their emotional resilience (Valente & Almeida, 2020; Wang et al., 2022). Emotional abilities such as ERA might modify how teachers view and react to everyday stressful events (Extremera & Rey, 2015). As demonstrated by previous studies, teachers' ERA reduces their stress and improves their mental health (Fathi & Derakhshan, 2019; Mérida-López et al., 2017) and well-being (Greenier et al., 2021; Mattern & Bauer, 2014). Research also indicates that individuals with high ERA have better quality social interactions (Lopes et al., 2005). Put differently, regulating emotions prompts the building of positive emotional connections, which lead to positive thinking and problem-solving (Isen, 2002).

### **Classroom Conflict Management**

One of the most prominent characteristics of human beings is their diversity. Different ways of being, thinking, and existing, mark the relationships between people (Valente et al., 2020). In this sense, interpersonal conflicts are understood as tension that involves different interests or positions and emerges when two or more parties experience emotional frustrations and interaction struggles due to the perceived incompatibility of interests (Mayer, 2000). Consequently, it is a basic and inevitable process that characterizes the dynamics of human relations (Montes et al., 2014), and is present in all schools.

The main cause of conflict in classrooms is tied to students' academic disinterest, lack

of study habits, and the obligation for students to remain in classes (Martins & Alves, 2019; Pérez-de-Guzmán et al., 2011). For authors, most of the conflicts during classes have a disturbing and undisciplined character. It should be noted that conflict management represents increasingly one of the main challenges for teachers since conflicts with students have become increasingly complex. These conflicts, as Valente et al. (2020) noted, derive not only from misunderstandings and disapproving behaviors during class but also from perceived differences in worldviews, ideologies, cultures, and life goals.

In the last few years, conflict situations have become a frequent reality in schools. Recent data, based on more than 15000 responses from Portuguese teachers, indicate that more than 60% suffer from emotional exhaustion, caused by causes such as excessive bureaucracy and students' indiscipline during classes (*Diário de Notícias*, July 6, 2018). In this sense, Martins and Alves's (2019) study indicates that the teachers' first reaction to a classroom conflict is a feeling of perplexity, followed by tension often permeated by reactive aggression, increasing insecurities and anguish in these professionals. Moreover, Thapa (2015) also emphasizes that teachers perceive conflicts as a series of negative impacts (e.g., development of frustration, and lack of professional motivation).

In addition to its dysfunctional and negative character, conflict also presents a significant opportunity for the development and enhancement of skills, critical reflection, and growth at personal, interpersonal, and group levels (Doğan, 2016). Therefore, effective strategies for conflict management can minimize negative impacts, helping to create a healthy environment to improve interpersonal relationships and job satisfaction (Morris-Rothschild & Brassard, 2006). Moreover, teachers believe that the negative impacts of conflicts can be reduced through adequate school conflict management (Manesis et al., 2019).

Rahim's (2002) conflict management model describes the strategies used to manage conflicts based on two dimensions: concern for self and concern for others. Concern for self refers to the degree to which individuals aim at satisfying their concerns in conflict management processes. In turn, the concern for others dimension refers to the degree of care about the other involved in the conflict. The result combined the two dimensions of Rahim's model are five strategies (i.e., integrating, obliging, dominating, avoiding, and compromising) for handling interpersonal conflict (Rahim, 2002). These strategies correspond to the attitudes presented to face conflicts. The first strategy is integrating, which indicates a high concern both for self and for others and is characterised by collaboration between the parties involved in the conflict to reach a mutual and constructive solution (Rahim, 2002). This strategy is connected with classroom problem-solving, and involves openness and exchanging information, being the ideal strategy for dealing with complex classroom problems (Valente & Lourenço, 2020a). The second strategy, which is called obliging, represents a conflict management strategy where cooperation is high and assertiveness is low. This strategy indicates a low concern for self and a high concern for others (Rahim, 2002). By using this strategy, the teacher presents a position of accommodation and submission in the presence of conflict in the classroom (Valente & Lourenço, 2020a). As the third strategy, dominating indicates a high concern for self and low concern for others (Rahim, 2002). Using this strategy in classroom conflict, the purpose is to find a satisfactory agreement for the teacher. Thus, the teacher resorts to the use of his power, with verbal dominance and perseverance, and denies responsibility to the detriment of the student (Valente & Lourenço, 2020a). Avoiding is the fourth strategy that is characterised by a low degree of assertiveness and a low degree of cooperation, where neither their interests nor they are of those on the other are satisfied. It indicates a low concern both for self and for others (Rahim, 2002). Using this strategy, the teacher aims to avoid disagreement with the student. As such, their tactics are to physically and/or psychologically abandon conflicts, deny the existence of conflict, change or avoid certain topics, and use non-committal

statements (Valente & Lourenço, 2020a). Finally, compromising is the fifth strategy, which represents the attempt to satisfy, moderately and partially, the interests of all, and shares points in common (Rahim, 2002). Thus, the teacher's purpose is an intermediate solution for conflict management, knowing how to reduce differences with the student, suggesting an exchange of proposals, and providing a quick solution to the classroom conflict (Valente & Lourenço, 2020a). Among the variables that influence the choice of different conflict management strategies, teachers' EI stands out. Thus, teachers who tend to have higher levels of EI use more integrating and compromising strategies, and fewer strategies of avoiding, obliging, and dominating, for conflict management in the classrooms (Valente & Lourenço, 2020a).

Although many studies have explored how emotional regulation influences other variables (e.g., Castellano et al., 2019; Hwang & Park, 2022), conflict management, in particular, has received little attention. Despite the knowledge gap on the influence of teachers' ERA in conflict management, studies on other professionals show that ERA influences the selection and use of strategies for conflict management (e.g., Chen et al., 2019; Villamediana et al., 2015). These studies consider the implications of ERA for conflict resolution, specifically showing that ERA influence the selection and use of conflict management strategies having a positive relationship with integrating, compromising, and avoiding strategies (Chen et al., 2019; Villamediana et al., 2015); and a negative relationship with obliging and dominating strategies (Villamediana et al., 2015).

Considering the increase in classroom conflict, in teacher-student relationships (Doğan, 2016; Zurlo et al., 2020), more studies are needed to assess which teacher variables influence conflict management (Morris-Rothschild & Brassard, 2006). However, little is known about how teachers' emotional skills influence classroom conflict management (Valente & Lourenço, 2020a). Thus, the main goal of the present study is to investigate how teachers' ERA influences the conflict management strategies used in the class.

## **Research Aims and Hypotheses**

The main objective of this study was to investigate how teachers' ERA influences classroom conflict management; specifically, how influences the decisions to use different strategies to manage conflict in the classroom. Based upon prior studies, the proposed hypotheses were: a) a positive and statistically significant relationship between teachers' ERA and integrating strategy is expected (H1); b) a positive and statistically significant relationship between teachers' ERA and compromising strategy is expected (H2); c) a positive and statistically significant relationship between teachers' ERA and avoiding strategy is expected (H3); d) a negative and statistically significant relationship between teachers' ERA and obliging strategy is expected (H4); and e) a negative and statistically significant relationship between teachers' ERA and dominating strategy is expected (H5).

## **Methods**

### **Participants**

Following a cross-sectional design, approximately 1000 questionnaires were distributed among public school groupings mostly placed in the Portugal north. A total of 900 questionnaires were collected, and 97.6% were retained for analysis. Due to missing answers, 22 questionnaires were excluded. Thus, the final sample was a convenience sample, comprised of 878 teachers (61% women) working in basic education (45%; 5<sup>th</sup> to 9<sup>th</sup> grades)

and in secondary education (55%; 10<sup>th</sup> to 12<sup>th</sup> grades). Regarding teaching experience, 11.2% had less than 10 years, 25.2% between 10-20 years, 44.2% between 21-30 years, and 19.5% more than 30 years. Regarding the academic background, 74.8% held a post-graduate degree, 21.6% a master's, 2.1% a bachelor's degree, and 1.5% a doctorate.

### Instruments

As a measure of ERA, we used the *Questionário de Inteligência Emocional do Professor* (QIEP; Valente & Lourenço, 2020b). The questionnaire consists of 45 items, and the answers were obtained on a *Likert* scale with 6 options, from 1 (*never*) to 6 (*always*) to measure teachers' EI, distributed among three subscales: perceive and understand emotions, express and classify emotions, and manage and regulate emotions. For this study, only the subscale referring to the ERA was applied: the ability to manage and regulate emotions (16 items; e.g., I can stay in a good mood even if something unpleasant happens in the classroom). The Cronbach's  $\alpha$  for the current sample had an adequate value ( $\alpha = .89$ ).

Conflict resolution strategies were assessed using the Rahim Organizational Conflict Inventory-II - Portuguese Version in School Context (ROCI-II-PViSC; Valente et al., 2017). It comprises 28 items, rated on a 5-point *Likert* scale, ranging from 1 (*totally disagree*) to 5 (*totally agree*). Items distributed among five subscales: integrating, 7 items ( $\alpha = .85$ ; e.g., In a difficulty working with a student, I try to analyze the situation with him to find a solution acceptable to both); obliging, 6 items ( $\alpha = .76$ ; e.g., Faced with a work problem, I usually try to meet the needs of my student); dominating, 5 items ( $\alpha = .80$ ; e.g., In a problematic situation with a student, I usually stand firm to seek to impose my point of view); avoiding, 6 items ( $\alpha = .77$ ; e.g., I try not to disagree with students); and compromising, 4 items ( $\alpha = .85$ ; e.g., In face of work problems I try to reach agreements with my students).

### Procedures

All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee, approved by schools' directors, and teachers' participants, and respected the ethical standards set out in the Declaration of Helsinki (2013). The data were collected by the researchers, during the 2021/2022 academic year. Before collecting the data, which happened at a single time point, in each school, teacher participants are informed about the study purpose and ethical procedures were guaranteed, namely anonymity, responses confidentiality, and voluntary participation. Also were informed that it was important to respond honestly to questionnaires. The questionnaires were completed in the school, and applied by the researchers, in groups of 20-25 teachers. Filling out the questionnaires took between 10 and 15 minutes. The inclusion criterion for this study was that the participating teachers teach in public schools (5<sup>th</sup> to 12<sup>th</sup>), and all teachers participated in the study voluntarily.

### Data Analysis

For data analysis, the SPSS/AMOS 25 (Arbuckle, 2012) program was used, as well as descriptive statistics, Critical N (CN > 200; Hoelter, 1983), for sample size, and the Structural Equation Modelling (SEM) approach. In preparation, all cases with missing values were eliminated to help evaluate parameters, using the Maximum Likelihood (ML) estimation method. It was also decided to keep the outliers since the sample's descriptive

statistics (standard deviation, skewness, and kurtosis) did not prove to be inadequate.

Regarding the variable-level descriptive analysis, the result's normal distribution was appreciated by taking asymmetry indices below two and kurtosis indices below seven (Finney & DiStefano, 2013). In the sample, no variable reveals values close to such criteria, so it is justified to proceed with the estimation of the model's adjustment. Also, a significant Critical N indicates that the value adequately represents the sample size and informs that is sufficiently adequate to fit the model for the  $\chi^2$  test, which allows internal validity of the study, there is, on the one hand, the concern of using an adequate sample size that avoids obtaining results from undersized samples, which converge to mistaken conclusions from measurement errors. On the other hand, prevent a selection of respondents that exceeds the logical amount, avoiding unnecessary waste of resources and inappropriate ethical conduct.

About the use of the SEM technique, it is possible to evaluate the causal relationships between inferred variables (not directly observed) through a set of observed variables that serve as markers of each inferred or latent variable. In line with Byrne (2010) this technique reveals advantages over other techniques, such as (a) it allows taking into account that the variance is unstable over time; (b) makes it possible to calculate measurement errors (observed variables); and (c) makes it possible to quickly estimate the statistical significance of each causal effect and the global adjustment of the hypothetical model. If the global fit of the tested model is appropriate, the relationships or effects exhibited by the model are approved. The evaluation of SEM contrasting results is based on two criteria: global level of model adjustment and significance of the calculated regression coefficients.

The model was assessed using two criteria: the fit indices  $\chi^2$ ,  $\chi^2/df$ , Goodness-of-Fit Index (GFI  $\geq .90$ ), Adjusted Goodness-of-Fit Index (AGFI  $\geq .90$ ), Comparative Fit Index (CFI  $\geq .95$ ; Hu & Bentler, 1999), Tucker-Lewis Index (TLI  $\geq .95$ ; Hair et al., 2005), Root Mean Square Error of Approximation (RMSEA  $<.05$ ; Byrne, 2010). Second, the ERA influence on conflict management was evaluated from an effect magnitude approach using the coefficient of determination ( $\eta^2$ ): less than .04 is insignificant, between .04 and .25, small, between .25 and .64 moderate, and greater than .64, great (Ferguson, 2009). Likewise, the specific influence was assessed according to the magnitude of the  $\beta$  coefficient: less than .20 is insignificant, between .20 and .50, small, between .50 and .80 moderate, and greater than .80, large (Ferguson, 2009).

## Results

Table 1 presents the distribution of the results in the descriptive dimensions of the conflict management strategies and the ERA. Concerning the normality of the variables included in the model, we can see that teachers, predominantly use the integrating strategies (M = 28.43), followed by the strategies of avoiding (M = 20.56), obliging (M = 20.44), compromising (M = 15.82), and finally, the dominating (M = 15.23) strategies to manage the conflict in class.

Variables	Min.	Max.	M	SD	Skewness	Kurtosis
ERA	16	96	73.38	12.104	-0.698	1.398
Avoiding	6	30	20.56	4.924	-0.133	-0.720
Dominating	5	25	15.23	4.858	0.161	-0.441
Compromising	4	20	15.82	2.502	-0.620	0.577
Obliging	6	30	20.44	5.998	-0.348	-0.278
Integrating	7	35	28.43	5.901	-1.086	0.502

*Note.* M: mean; SD: standard deviation; ERA: emotion-regulation ability.

**Table 1: Descriptive statistics of the variables**



Figure 1 shows the SEM with the relationship between the variables. Taking into account the reference limit values previously indicated by the different authors, it appears that the values found for the goodness indexes of global adjustment of the proposed model are very acceptable, namely:  $\chi^2 = 17.337$ ;  $p = .067$ ;  $\chi^2 / gl = 1.734$ ; GFI = .993; AGFI = .986; TLI = .981; CFI = .987; RMSEA = .029 (CI 90% .000 - .051), confirming the hypothesis that the proposed model represents the relationships between the existing variables in the empirical matrix. The values of the Hoelter index for this study are appropriate and confirm de adequate sample size (440/0.05 and 478/0.01).

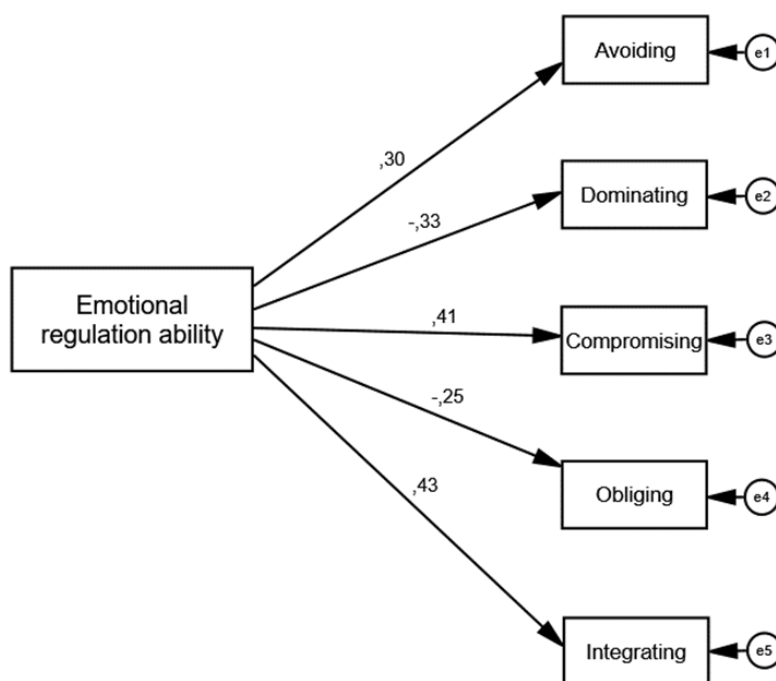


Figure 1: Research SEM

Considering the hypotheses presented, from the analysis of Table 2 and the SEM results (Fig. 1), it can be seen that all hypotheses were confirmed and considered statistically significant ( $p < .001$ ). Table 2 shows that teachers who tend to have greater ERA, in situations of classroom conflict management, use more strategies of integrating ( $\beta = .428$ ;  $p < .001$ ), compromising ( $\beta = .414$ ;  $p < .001$ ), and avoiding ( $\beta = .299$ ;  $p < .001$ ), and less strategies of obliging ( $\beta = -.250$ ;  $p < .001$ ) and dominating ( $\beta = -.325$ ;  $p < .001$ ) for management classroom conflict. Regarding the multiple square correlations, which refer to the value of variance explains the conflict management strategies from the ERA dimension, they indicate that integration with 18% ( $\eta^2 = .183$ ) and commitment with 17% ( $\eta^2 = .171$ ), approximately, are the strategies that have the highest explained variance in the model. There are also acceptable values of explained variance for the domination strategies of 11% ( $\eta^2 = .106$ ), avoidance at 9% ( $\eta^2 = .089$ ), and obliging at 6% ( $\eta^2 = .062$ ).

Variables	Min.	Max.	M	SD	Skewness	Kurtosis
ERA	16	96	73.38	12.104	-0.698	1.398
Avoiding	6	30	20.56	4.924	-0.133	-0.720
Dominating	5	25	15.23	4.858	0.161	-0.441
Compromising	4	20	15.82	2.502	-0.620	0.577
Obliging	6	30	20.44	5.998	-0.348	-0.278
Integrating	7	35	28.43	5.901	-1.086	0.502

*Note.* EVnS: estimated values no standardized; SEV: standardized estimated values; EE: estimated errors; \*\*\*:  $p < 0.001$ ; ERA: emotion-regulation ability.

**Table 2: Contrast results of the covariance structure**

## Discussion and Conclusion

This study aimed to investigate how teachers' ERA influences classroom conflict management, specifically how influences the use of different strategies to manage conflict. Previous studies have proven this relationship in other work contexts (Chen et al., 2019; Villamediana et al., 2015). Also, it is important to consider that a strategy is considered appropriate if its use leads to effective conflict resolution (Rahim, 2002). In this sense, the results indicate that teachers mostly resort to integration strategies, followed by avoidance, obligation, compromise, and finally, domination strategies to manage conflict in the classroom.

About H1, the results show a positive and significant correlation between teachers' ERA and the integrating strategy. This is consistent with prior research (e.g., Chen et al., 2019). So, teachers who tend to have more perceptions of their emotion regulation (i.e., greater ERA) apply more integration strategies to resolve classroom conflict, confirming H1. When using this strategy to manage conflict with students, teachers present a great concern for both themselves and the students. Thus, it seeks to share information, and/or examine both points of view (Rahim, 2002), because, this strategy involves the exchange of information, and analysis of differences to reach a successful conflict resolution. In this sense, teachers with high levels of emotion regulation are better able to apply strategies to regulate their emotions and the emotions of others (García-Tudela & Marín-Sánchez, 2021). Thus, in the presence of classroom conflict, they use more integration strategies. For example, they propose options, create statements that support the student, make concessions, maximize similarities, and minimize differences between teacher-student (Valente & Lourenço, 2020a). For the authors, is the appropriate strategy for dealing with complex classroom problems.

Based on the hypothesis that is a positive and statistically significant relationship between teachers' ERA and compromising strategy (H2), the results show those teachers' who tend to have greater ERA use more the compromising strategy. So, the results confirm the hypothesis presented. Also, Villamediana et al. (2015) found a significant and moderate correlation between the variable emotion management and commitment strategy. Compromising strategy characterizes the attempt to satisfy, moderately and partially, the interests of all, and shares points in common, characterised by being an intermediate strategy of assertiveness and cooperation (Rahim, 2002). These positive relationships between teachers' ERA and the use of compromising strategies can be explained by the teacher's great capability to be better able to identify, use, understand and manage your emotions and those of students. Thus, the teacher's purpose is an intermediate solution for conflict management, knowing how to reduce differences with the student, suggesting an exchange of proposals, and providing a quick solution to the classroom conflict (Valente & Lourenço, 2020a).

The results also indicate a positive relationship between teachers' ERA and the avoiding strategy (H3), confirming the hypothesis, as in previous studies (e.g., Chen et al. 2019). Avoiding strategies are characterised by a low degree of assertiveness and a low degree of cooperation (Rahim, 2002). So, teachers who tend to have higher ERA, in the presence of conflict in class, in addition to integrating and compromising strategies, also use avoiding strategies to manage conflict. The use of the avoiding strategy can be explained as being a useful strategy when the problem is not important, or when more time is needed to collect information about the conflict (e.g., postponing conflict resolution for the class end, resolving the same only in the presence of the student involved in the conflict). It should be noted that the advantages of using the avoiding strategy are saving time, in situations of minor problems, and the fact that it can prevent conflict escalation (Rahim, 2002), putting off management of conflict to a more appropriate moment. One possible explanation for this result suggests that the ability to regulate emotions and maintain a reflective attitude towards conflict allows for a greater ability to manage it at the right time (e.g., postponing conflict resolution for the class end) to maintain a good atmosphere in class. Also, Karagianni and Roussakis (2015) point out that teachers usually avoid confrontations for benefit of maintaining a good working atmosphere.

Regarding H4, results show a negative relationship between teachers' ERA and the strategy of obliging, confirming the hypothesis. Therefore, teachers who tend to have a greater capacity to regulate their emotions, resort less to the use of this strategy to manage conflicts in class. Also, Villamediana et al. (2015) study shows equal results between these variables. When teachers use this strategy, gives in to the student's wishes and shows accommodating behavior in presence of conflict, that is, he passively agrees with the students' decisions (Valente & Lourenço, 2020a). The same negative association occurs between teachers' ERA and the strategy of dominating (H5). This strategy is a demonstration of authority ignoring others' needs and perspectives. Furthermore, it is considered an aggressive strategy (Rahim, 2002). Thus, teachers who tend to have a greater ERA resort less to the use of these strategies, as they have a greater ability to be open to the information contained in emotions, use that information to make decisions, and know how to moderate and manage emotional reactions face of intense classroom situations. Also, Villamediana et al. (2015) show the same relationship between emotional regulation and dominating strategy.

Classroom conflicts burst frequently and have, oftentimes, negative effects on the teaching-learning process (Thapa, 2015). This study confirms, based on the results, that teachers' ERA offers opportunities for conflict management, through the use of more constructive strategies to resolve the conflicts in the teacher-student relationship. As results show, teachers who tend to have more ERA select and use more integrating, compromising, and avoiding strategies; and fewer strategies of obliging and dominating for managing classroom conflict. These results can be explained because teachers' who have more ERA, can identify, perceive, express, and manage emotions more successfully, and thus understand and better managing conflicts in the teacher-student relationships. By better understanding and managing their emotions, it is easier to know and manage their students' emotions, permitting teachers to interact with students more emotionally and efficiently in conflict during classes.

The results of this study have implications from the theoretical and practical points of view. Regarding theoretical implications, results demonstrate the significance of teachers' ERA, in the process of conflict management in teacher-student relationships. Teachers, as conflict managers in the class, must be able to assess and manage emotions, which arise before, during, and after the conflict. So, it is essential to support teachers, by providing knowledge about emotional processes, and training their emotional abilities. Thus, this study may contribute to the design of teacher emotional development programs by highlighting the

importance of ERA as an important skill for managing conflict in the classroom. In this context, and terms of practical implications, it is essential to assume that teachers' training must include the development of emotional regulation skills (in pre-service and in-service teachers' training), due to the importance of professional performance, in particular, on the influence on the use of strategies for conflict management in the classroom.

While this study's results are encouraging, they should be interpreted in light of some limitations. First, little is known about how teachers' ability to regulate emotions (i.e., ERA) influences conflict management in teacher-student relationships (Hopkins & Yonker, 2015; Valente & Lourenço, 2020a). So, the results may be distinct in other countries with different school organizations and cultural backgrounds. Thus, it is suggested that the study be replicated in other cultural contexts. Second, the use of self-report measures might lead to overstated results related to collective method bias. In addition to the self-report measures in the strategies description used in conflict management, it is essential to complement with objective data on the number of occurrences, disciplinary procedures implemented, or even listening to students. Still, it makes sense to previously stratify the sample according to some teachers' variables, such as the level of education they teach and the scientific area of their discipline, so that the analysis of the results can meet some contextual variables. Another limitation was that the studied teachers were mainly females, limiting the sample variability. However, this reveals the reality of Portuguese schools, where female teachers are a much higher percentage than males (PORDATA, 2021). Future studies should include other personal and organizational variables that can influence teachers' ERA and the choice of conflict management strategies. In addition, the present inquiry has only focused on the impacts of emotion regulation as an instance of positive interpersonal behaviors. It is encouraging to study the applications, implications, and impacts of other positive interpersonal behaviors such as care, confirmation, credibility, closeness, and clarity. The final limitation of this research lies in the fact that the present study was solely conducted in Portugal. Accordingly, cross-cultural investigations examining the implications of emotion regulation and other teacher interpersonal behaviors as well as other variables subsumed under positive psychology in different countries are highly recommended.

In conclusion, this study provides new evidence about teachers' emotional regulation and classroom conflict management. Namely, it shows that teachers who tend to have more ERA select and use more strategies of integrating, compromising, and avoiding; and fewer strategies of obliging and dominating for managing classroom conflict. So, given this study's results, it is suggested that emotional education should be introduced in teachers' training (in pre-service and in-service teachers), so that they can acquire emotional regulation skills, due to their importance in classroom conflict management.

## References

- Arbuckle, J. L. (2012). *IBM SPSS AMOS 21 user's guide*. Smallwaters Corporation.
- Betancourt, H. (2004). Attribution-emotion processes in white's realistic empathy approach to conflict and negotiation. *Peace and Conflict: Journal of Peace Psychology*, 10(4), 369-380. [https://doi.org/10.1207/s15327949pac1004\\_7](https://doi.org/10.1207/s15327949pac1004_7)
- Byrne, B. M. (2010). *Structural Equation Modeling With AMOS – Basic Concepts, Applications, and Programming*. Lawrence Erlbaum.
- Castellano, E., Muñoz-Navarro, R., Toledo, M., S., Spontón, C., & Medrano, L. A. (2019). Cognitive processes of emotional regulation, burnout and work engagement. *Psicothema*, 31(1), 73-80. <https://doi.org/10.7334/psicothema2018.228>
- Chen, H. X., Xu, X., & Phillips, P. (2019). Emotional intelligence and conflict management styles. *International Journal of Organizational Analysis*, 27(3), 458-470. <https://doi.org/10.1108/IJOA-11-2017-1272>
- Declaration of Helsinki (2013). Ethical principles for medical research involving human subjects. *JAMA*, 310(20), 2191-2194. <https://doi.org/10.1001/jama.2013.281053>
- Desivilya, H. S., & Yagil, D. (2005). The role of emotions in conflict management: The case of work teams. *The International Journal of Conflict Management*, 16(1), 55-69 <https://doi.org/10.1108/eb022923>
- DN/Lusa (julho, 2018). *Mais de 60% dos professores sofre de exaustão emocional*. <https://www.dn.pt/vida-e-futuro/mais-de-60-dos-professores-sofre-de-exaustao-emocional---estudo-9558111.html>
- Doğan, S. (2016). Conflicts management model in school: A mixed design study. *Journal of Education and Learning*, 5(2), 200-219. <https://doi.org/10.5539/jel.v5n2p200>
- European Commission. (2013, July). *Supporting teacher competence development for better learning outcomes*. [https://ec.europa.eu/assets/eac/education/experts-groups/2011-2013/teacher/teachercomp\\_en.pdf](https://ec.europa.eu/assets/eac/education/experts-groups/2011-2013/teacher/teachercomp_en.pdf)
- Extremera, N., & Rey, L. (2015). The moderator role of emotion regulation ability in the link between stress and well-being. *Frontiers in Psychology*, 6, 16-32. <https://doi.org/10.3389/fpsyg.2015.01632>
- Fathi, J., & Derakhshan, A. (2019). Teacher self-efficacy and emotional regulation as predictors of teaching stress: An investigation of Iranian English language teachers. *Teaching English Language*, 13(2), 117-143. <https://doi.org/10.22132/TEL.2019.95883>
- Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice*, 40(5), 532-538. <https://doi.org/10.1037/a001580>
- Finney, S., & DiStefano, C. (2013). Non-normal and categorical data in structural equation models. In G. Hancock & R. Mueller (Eds.), *A second course in structural equation modeling* (pp. 439-492). Information Age. <https://go.gale.com/ps/anonymou?id=GALE%7CA215408844&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=01295977&p=AONE&sw=w>
- García-Tudela, P. A., & Marín-Sánchez, P. (2021). Educación de la inteligencia emocional en edad escolar: Un estudio exploratorio desde la perspectiva docente. *Revista Electrónica Educare*, 25(3), 1-21. <https://doi.org/10.15359/ree.25-3.6>
- Göksoy, S., & Argon, T. (2016). Conflicts at schools and their impact on teachers. *Journal of Education and Training Studies*, 4(4), 197-205. <https://doi.org/10.11114/jets.v4i4.1388>

- Greenier, V., Derakhshan, A., & Fathi, J. (2021). Teacher emotional regulation and psychological well-being in teacher work engagement: A case of British and Iranian English language teachers. *System*, 97, 102446. <https://doi.org/10.1016/j.system.2020.102446>
- Hair, J., Anderson, R., Tatham, R., & Black, W. (2005). *Análise multivariada de dados*. Bookman.
- Hoelter, J. W. (1983). The analysis of covariance structures: Goodness-of-fit indices. *Sociological Methods and Research*, 11(3), 325-344. <https://doi:10.1177/0049124183011003003>
- Hopkins, M. M., & Yonker, R. D. (2015). Managing conflict with emotional intelligence: Abilities that make a difference. *Journal of Management Development*, 34(2), 226-244. <https://doi.org/10.1108/JMD-04-2013-0051>
- Hu, L.-T., & Bentler, P. M. (1999). Cut off criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55. <https://doi.org/10.1080/10705519909540118>
- Hwang, W. J., & Park, E. H. (2022). Developing a structural equation model from Grandey's emotional regulation model to measure nurses' emotional labor, job satisfaction, and job performance. *Applied Nursing Research*, 64, 151557. <https://doi.org/10.1016/j.apnr.2021.151557>
- Isen, A. M. (2002). A role for neuropsychology in understanding the facilitating influence of positive affect on social behaviour and cognitive processes. In Snyder C. R., & Shane J. L (Eds.), *Handbook of Positive Psychology*. University Press
- Joseph, D. L., & Newman, D. A. (2010). Emotional intelligence: An integrative metaanalysis and cascading model. *Journal of Applied Psychology*, 95(1), 54-78. <https://doi.org/10.1037/a0017286>
- Karagianni, E. & Roussakis, I. (2015). Anatomia kai diachirisi ton sigkrouseon metaxi ton ekpaideftikon sti scholiki monada: Theorisi, dierevnisi kai praktiki [Anatomy and management of conflicts among schoolteachers: validation, exploration and practice]. In G. Papadatos, S. Polychronopoulou, & A. Mpastea (Eds.), *5th Panhellenic conference for Education Sciences*, (pp. 547-558). National & Kapodistrian University of Athens. <https://eproceedings.epublishing.ekt.gr/index.php/edusc/article/view/243/208>
- Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition & Emotion*, 23(1), 4-41. <http://dx.doi.org/10.1080/02699930802619031>
- Lopes, P. N., Salovey, P., Côté, S., & Beers, M. (2005). Emotion regulation abilities and the quality of social interaction. *Emotion*, 5(1), 113-118. <https://doi.org/10.1037/1528-3542.5.1.113>
- Littleton, A. (2018). Emotion regulation strategies of kindergarten ESL teachers in Japan: An interview-based survey. *Language Learning Journal*, 1-16. <https://doi.org/10.1080/09571736.2018.1542020>
- Martins, A. M., & Alves, M. G. (2019). Conflitos em escolas públicas em Portugal: Análise de um programa de governo. *Ensaio: Avaliação e Políticas Públicas em Educação*, 27(102), 9-23. <https://doi.org/10.1590/s0104-40362018002701628>
- Mattern, J., & Bauer, J. (2014). Does teachers' cognitive self-regulation increase their occupational well-being? The structure and role of self-regulation in the teaching context. *Teaching and Teacher Education*, 43, 58-68. <https://doi.org/10.1016/j.tate.2014.05.004>
- Mauss, I. B., Levenson, R. W., McCarter, L., Wilhelm, F., & Gross, J. J. (2005). The tie that binds? Coherence among emotion experience, behavior, and physiology. *Emotion*, 5(2), 175-190. <https://doi.org/10.1037/1528-3542.5.2.175>

- Mayer, B. (2000). *The Dynamics of Conflict Resolution*. Jasley-Bass
- Mayer, J. D., & Salovey, P. (1997). What is Emotional Intelligence? In P. Salovey & J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-31). Basic Books.
- Mayer, J. D., Caruso, D. R., & Salovey, P. (2016). The ability model of emotional intelligence: Principles and updates. *Emotion Review*, 8(4), 290-300.  
<https://doi.org/10.1177/1754073916639667>
- Mayer, J., Salovey, P., Caruso, D., & Cherkasskiy, L. (2011). Emotional Intelligence. In R. Sternberg & S. Kaufman (Eds.), *The Cambridge handbook of intelligence* (pp. 528-549). Cambridge Handbooks in Psychology.  
<https://doi.org/10.1017/CBO9780511977244.027>
- Mérida-López, S., Extremera, N., & Rey, L. (2017). Emotion-regulation ability, role stress and teachers' mental health. *Occupational Medicine*, 67(7), 540-545.  
<https://doi.org/10.1093/occmed/kqx125>
- Montes, C., Rodríguez, D., & Serrano, G. (2014). Estrategias de manejo de conflicto en clave emocional. *Anales de psicología*, 30(1), 238-246.  
<https://doi.org/10.6018/analesps.30.1.135171>
- Mora, F. (2021). *Neuroeducación: Solo se puede aprender aquello que se ama* (3rd ed.). Alianza editorial.
- Morris-Rothschild, B. K., & Brassard, M. R. (2006). Teachers' conflict management styles: The role of attachment styles and classroom management efficacy. *Journal of School Psychology*, 44(2), 105-121. <https://doi.org/10.1016/j.jsp.2006.01.004>
- Pérez-de-Guzmán, M. V., Vargas, M., & Amador Muñoz, L. V. (2011). Resolución de conflictos en las aulas: Un análisis desde la investigación-acción. *Pedagogía Social. Revista Interuniversitaria*, 18, 99-114. [https://doi.org/10.7179/PSRI\\_2011.18.08](https://doi.org/10.7179/PSRI_2011.18.08)
- Pishghadam, R., Derakhshan, A., Zhaleh, K., & Habeb Al-Obaydi, L. (2021). Students' willingness to attend EFL classes with respect to teachers' credibility, stroke, and success: A cross-cultural study of Iranian and Iraqi students' perceptions. *Current Psychology*, 40(4), 1-15. <https://doi.org/10.1007/s12144-021-01738-z>
- PORDATA (2021). Base de Dados Portugal Contemporâneo. *Docentes do sexo feminino em % dos docentes em exercício nos ensinos pré-escolar, básico e secundário: total e por nível de ensino*. Fundação Francisco Manuel dos Santos.  
<https://www.pordata.pt/Portugal/Docentes+do+sexo+feminino+em+percentagem+dos+docentes+em+exerc%C3%ADcio+nos+ensinos+pr%C3%A9+escolar++b%C3%AAsico++e+secund%C3%A1rio+total+e+por+n%C3%ADvel+de+ensino-782>
- Rahim, M. (2002). Toward a theory of managing organizational conflict. *The International Journal of Conflict Management*, 13(3), 206-235. <https://doi.org/10.1108/eb022874>
- Rispens, S., & Evangelia, D. (2016). Conflict at work, negative emotions, and performance: A diary study. *Negotiation and Conflict Management Research*, 9(2), 103-119.  
<https://doi.org/10.1111/ncmr.12069>
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211. <https://doi.org/10.2190/DUGG-P24E-52WK-6CDG>
- Savina, E., Fulton, C., & Beaton, C. (2021). *Training teachers in emotional intelligence: A transactional model for elementary education*. Routledge.  
<https://doi.org/10.4324/9781003219774-1>
- Sutton, R. E., Mudrey-Camino, R., & Knight, C. C. (2009). Teachers' emotion regulation and classroom management. *Theory Into Practice*, 48(2), 130-137.  
<https://doi.org/10.1080/00405840902776418>
- Thapa, T. (2014). Impact of conflict on teaching learning process in schools. *Academic Voices*, 5(1), 73-78.

- Valente, S., & Almeida, L. S. (2020). Educação emocional no ensino superior: Alguns elementos de reflexão sobre a sua pertinência na capacitação de futuros professores. *Revista E-Psi*, 9(1), 152-164.
- Valente, S., & Lourenço, A. A. (2020a). Conflict in the classroom: How teachers' emotional intelligence influences conflict management. *Frontiers in Education*, 5(5), 1-10. <https://doi.org/10.3389/feduc.2020.00005>
- Valente, S., & Lourenço, A.A. (2020b). Questionário de inteligência emocional do professor: Adaptação e validação do “Emotional Skills and Competence Questionnaire”. *Revista de Estudios e Investigación en Psicología y Educación*, 7(1), 12-24. <https://doi.org/10.17979/reipe.2020.7.1.5480>
- Valente, S., Monteiro, A. P., & Lourenço, A. A. (2017). Adaptação e validação da escala de gestão de conflitos entre professores-alunos. *Revista de Estudios e Investigación en Psicología y Educación*, 2, 41-45. <https://doi.org/10.17979/reipe.2017.0.02.2512>
- Valente, S., Lourenço, A. A., & Németh, Z. (2020). School conflicts: Causes and management strategies in classroom relationships. In M. P. Levine (Ed.), *Interpersonal Relationships*. IntechOpen. <https://doi.org/10.5772/intechopen.95395>
- Valente, S. N., Lourenço, A. A., & Dominguez-Lara, S. (2022). Teachers in the 21st century: Emotional intelligence skills make the difference. In H. Şenol (Ed.), *Pedagogy - Challenges, Recent Advances, New Perspectives, and Applications*. IntechOpen. <https://doi.org/10.5772/intechopen.103082>
- Villamediana, J., Donado, A., & Zerpa, C.E. (2015). Estratégias de manejo de conflictos, inteligencia emocional y desarrollo moral. *Revista Dimensión Empresarial*, 13(1), <https://doi.org/10.15665/rde.v13i1.339>
- Wang, Y., Derakhshan, A., & Rahimpour, H. (2022). Developing resilience among Chinese and Iranian EFL teachers: A multi-dimensional cross-cultural study. *Journal of Multilingual and Multicultural Development*, 1-18. <https://doi.org/10.1080/01434632.2022.2042540>
- Xie, F., & Derakhshan, A. (2021). A conceptual review of positive teacher interpersonal communication behaviors in the instructional context. *Frontiers in Psychology*, 12, 708490. <https://doi.org/10.3389/fpsyg.2021.708490>
- Zurlo, M. C., Vallone, F., Dell'Aquilaa, E., & Marocco, D. (2020). Teachers' patterns of management of conflicts with students: A study in five European countries. *Europe's Journal of Psychology*, 16(1), 112-127. <https://doi.org/10.5964/ejop.v16i1.1955>

### Acknowledgments

We would like to express our deep gratitude for the voluntary collaboration of teachers who participated in this study.