Exploring the role of classroom management in the relationship between elementary school teachers' social-emotional competence and classroom outcomes

Brooke MacLeod

Department of Educational and Counseling Psychology

McGill University

August 8, 2024

A Thesis Submitted to McGill University

in Partial Fulfilment of the Requirements of the Degree of

Master of Arts in Educational Psychology

Table of Contents

List of Tables

List of Figures

Abstract

The present study investigated the role of key classroom management factors (i.e., teachers' emotions and discipline styles) in the relationship between teachers' social-emotional skills and three outcomes: teacher burnout, student-teacher relationships, and student behaviour. Participants consisted of 123 Canadian elementary school teachers (M_{age} = 38, 81% female) who completed an online self-report survey. A mediational path analysis revealed that higher levels of social-emotional competence were significantly related to more positive emotions (β = .677, $p <$ .001) and more authoritative discipline styles (β = .645, $p <$ .001) among teachers. Furthermore, teachers' emotions fully mediated the relationships between social-emotional competence and burnout (β = -.330, $p <$ .001), and partially mediated between social-emotional competence and student-teacher relationships (β = .174, p =.005). Teachers' discipline styles fully mediated the relationship between social-emotional competence and student behaviour (β = .294, p =.001). These results indicate that classroom management may play an important role in facilitating the effects of teachers' social-emotional competence. Implications for social-emotional learning related trainings and programs for teachers are discussed.

Keywords: social-emotional learning, teachers, classroom management, burnout, student-teacher relationships, student behaviour.

Résumé

La présente étude a examiné le rôle des principaux facteurs de gestion de la classe (c'est-à-dire les émotions des enseignants et les styles de discipline) dans la relation entre les compétences socio-émotionnelles des enseignants et trois résultats : L'épuisement professionnel des enseignants, les relations élèves-enseignants et le comportement des élèves. Les participants étaient 123 enseignants canadiens d'école primaire (moyenne = 38, 81 % de femmes) qui ont répondu à une enquête d'auto-évaluation en ligne. Une analyse des voies de médiation a révélé que des niveaux plus élevés de compétences socio-émotionnelles étaient significativement liés à des émotions plus positives ($β$ = .566, p < .001) et à des styles de discipline plus autoritaires ($β$ = .424, p < .001) chez les enseignants. En outre, les émotions des enseignants ont entièrement médiatisé la relation entre la compétences socio-émotionnelles et l'épuisement professionnel ($β$ = -.318, p < .001), et partiellement médiatisé la compétences socio-émotionnelles et les relations élèves-enseignants ($β$ = .195, p =.005). Les styles de discipline des enseignants ont entièrement médiatisé la relation entre la compétences socio-émotionnelles et le comportement des élèves ($β$ = .196, p =.001). Les résultats indiquent que la gestion de la classe peut jouer un rôle important dans l'impact des compétences socio-émotionnelles des enseignants. Les implications pour les formations et les programmes liés à la compétence socio-émotionnelle des enseignants sont discutées.

Mots-clés: apprentissage socio-émotionnel, enseignants, gestion de classe, épuisement professionnel, relations élèves-enseignants, comportement des élèves.

Acknowledgements

There are many important people who I would like to thank for their instrumental roles in the completion of this paper. Firstly, I must express my sincere gratitude to my supervisor, Dr. Chiaki Konishi for her continuing support, guidance, and encouragement, over the past two years as I completed my degree and my thesis project. She has helped me grow as an academic and a researcher by pushing me to challenge myself in my studies and research. I greatly appreciate her passion and commitment to promoting social and emotional learning which has inspired me and contributed to my own interests and passions.

I would also like to state my appreciation for my thesis examiner, Dr. Michael Hoover, for lending his time and expertise to provide me with valuable feedback.

Moreover, I am very thankful to the members of the Social Emotional Development Research Group as well as the students in my cohort in the Human Development program for all of their support and camaraderie.

Lastly, I would like to express my deep gratitude to my family and friends. My parents in particular have been instrumental in my success in this program, and I will always be incredibly thankful for their support, encouragement, and generosity. I am also very thankful for my partner, who has always believed in me and has provided me with unwavering support and comfort throughout this experience.

Introduction

Both researchers and professionals within the fields of education and psychology have been working to promote social and emotional learning (SEL) for students and youth for a number of years. This effort is prompted by various research that demonstrates how SEL can lead to positive benefits for students, including higher academic performance, better social outcomes, and better mental well-being (Durlak et al., 2011). While the majority of literature on SEL has focused on outcomes related to students' social-emotional skills, a few studies have begun to explore SEL outcomes in relation to teachers as well (e.g., Fitzgerald et al., 2022; Kim et al., 2021; Oliveira et al., 2021). However, this area is still underdeveloped and there is much left to be understood. In particular, there has yet to be an investigation into potential mechanisms through which teachers' social-emotional competence (SEC) may have an impact on student and teacher outcomes. The present study seeks to examine the potential roles of classroom management factors in the relationship between teachers' SEC and important outcomes for teachers, students, and the classroom. First, this paper will present an overview of SEL and how important classroom outcomes are related to social-emotional competencies (SECs) of teachers. Then, classroom management will be discussed as well as why key factors of classroom management may mediate between teachers' SEC and classroom outcomes.

Literature Review

Social and Emotional Learning

Beyond the academic skills and knowledge that are emphasized in schools, there are various 'life skills' which are crucial for navigating different day-to-day situations. Social and emotional learning (SEL) is a framework that outlines the development of various social and emotional skills (Collaborative for Academic, Social, and Emotional Learning; CASEL, 2020),

which are crucial in leading a healthy and functional life (Greenberg et al., 2017). There are five core social and emotional competencies within the SEL framework: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020). Further descriptions of each competency within the CASEL framework (2020) are as follows:

Self-awareness describes how an individual understands and identifies their emotions, thoughts, and values, as well as how they are connected to each other and to their behaviours. Self-management describes skills that contribute to self-discipline and to the ability to manage emotions, thoughts, and behaviors. Social awareness involves competency in perspective-taking, empathy, and identifying social norms. Relationship skills cover competencies in effective communication, conflict resolution, and developing and maintaining positive relationships. And lastly, responsible decision making involves anticipating consequences of actions and using contextual information to make reasonable and caring choices.

The level of one's development in these skills makes up their overall SEC, and research has consistently demonstrated positive outcomes for students associated with their SEC. For example, a meta-analysis of 213 SEL programs found that the implementation of these programs in schools resulted in significant improvements in academic achievement, social relationships, behaviours, and mental well-being (Durlak et al., 2011). However, literature examining the SEC of teachers and associated outcomes has been less thoroughly researched. As teachers are integral to the school environment and to the development of students' SEC (Jennings & Greenberg, 2009; Konishi et al., 2022; Poulou & Denham, 2022), it is important to include them in research and in efforts to promote SEL. Furthermore, based on the strong evidence of benefits for students, it is important to examine how SEL may benefit teachers themselves.

SEL and Teachers

As SEL encompasses skills that are crucial at every stage of life, it is important not to overlook the value of promoting SEL for adults, not just children and youth. Teachers are a population that might especially benefit from SEL as their jobs are highly social in nature and require substantial emotional labour (Näring et al., 2012). However, even among the SEL research that includes teachers, much of it is still centered around the social-emotional development of students. For instance, while some studies have examined teachers' abilities and attitudes towards facilitating SEL (e.g., Brackett et al., 2011, Collie et al., 2015, Ee & Cheng, 2013), the aim of this research was to further the understanding of how to improve SEL implementation for students, not for teachers.

However, there has been some recent examination of the outcomes of teachers' own social-emotional competence. For example, a meta-analysis of 13 studies examining the impact of SEL on teachers' burnout levels found that SEL interventions for teachers significantly reduced two of the main burnout symptoms: emotional exhaustion and depersonalization (Oliveira et al., 2021). Similarly, a recent mixed method study found that the implementation of an SEL program for teachers led to significantly less emotional exhaustion (Kim et al., 2021). These findings are important as burnout is highly prevalent among teachers (Agyapong et al., 2022) and can lead to various negative outcomes, such as poorer mental and physical health (Hakanen et al., 2006), and increased intention to leave the profession (Leung & Lee, 2006). These findings are also in line with the SEL framework, as SEC involves the development of skills that support individuals in the management of negative emotions and stressors (CASEL, 2020), which are thought to be major contributors to experiences of burnout (Maslach & Leiter, 2016).

While less studied, researchers have also suggested that teachers' SEC may influence student-teacher relationships. Jennings and Greenberg (2009) outline a theoretical model of a prosocial classroom and discuss various factors that may be influential for maintaining a positive learning environment for students and teachers. In this model, teachers' SEC is highlighted as an important factor for student-teacher relationships as teachers with further developed social-emotional skills may be better equipped to navigate the emotions and social needs of various students. Although limited, there is some empirical evidence that supports this. For instance, a recent study found that the implementation of an SEL-based program resulted in higher levels of teachers' SEC as well as in significantly less student-teacher conflict (Fitzgerald et al., 2022). Furthermore, based on the findings of their study, Sandilos et al. (2023) suggest that an SEL intervention program for teachers may help maintain positive interactions between students and teachers. There is also evidence that childcare workers who have higher emotional competence also have closer relationships with the children under their care (Garner et al., 2019). As SEL encompasses skills in social awareness, relationship skills, and emotion management (CASEL, 2020), the notion that greater levels of SEC among teachers would result in more positive student-teacher relationships is in line with the SEL framework. Student-teacher relationships are an important part of school climate (Konishi et al., 2022) and have many implications including students' self-expectations and academic trajectories, and the mental wellbeing of both students and teachers (Jussim & Harber, 2005; McHugh et al., 2013; Rucinski et al., 2018; Split et al., 2011), thus this area of research is crucial to examine further.

Another important classroom outcome that may be implicated by teachers' SEC is the behaviour of students. In their model of the prosocial classroom, Jennings & Greenberg (2009) describe how teachers who have developed social and emotional skills can more effectively

establish a positive classroom environment. Part of this includes setting and maintaining

behavioural expectations, and encouraging respect, cooperation, and other prosocial behaviours

and classroom interactions (Jennings et al., 2017). While there may be a strong theoretical

argument for the relationship between teachers' SEC and student behaviour, there is an

unfortunate lack of empirical evidence to directly support it. However, there is evidence that

teachers' emotional intelligence is related to less behavioural difficulties in students (Nizielski et

al., 2012; Poulou, 2017). Emotional intelligence, while different, can be considered adjacent to

SEL, as it includes some similar components such as the recognition, understanding, and

management of emotions (Brackett & Katulak, 2006). Therefore, in the absence of literature

specifically examining SEL and student behaviour, these findings do point in a positive

direction. Furthermore, due to key SEL competencies including relationship skills, social

awareness, and decision-making skills (CASEL, 2020), it would be consistent with the SEL

framework that social-emotional competencies of teachers would influence the behaviour of

students.

  The aforementioned evidence demonstrates an optimistic direction with regard to positive

outcomes of SEL for teachers. However, there is still much left to explore and understand

regarding how teachers' SEC may impact themselves, their students, and their classrooms. In

particular, there is a gap in investigating the mechanisms through which teachers' SEL skills lead

to positive benefits. One area that should explored with regard to this topic is the role of specific

teaching skills. For instance, while some have speculated that SEL may enhance teachers'

classroom management abilities (Jennings & Greenberg, 2009; Oliveira et al., 2021), there has

yet to be a study that specifically examines this. In turn, classroom management, as an integral

part of teaching and important factor of various classroom outcomes (Djigic & Stojiljkovic,

2011; Jennings & Greenberg, 2009), has the potential to facilitate various positive effects of SEL for students, teachers, and the classroom climate.

Classroom Management

Practices that teachers engage in to ensure that their classrooms are suitable learning environments for their students are what define classroom management (Brophy, 2006; Evertson & Weinstein, 2006). In other words, teachers are responsible for maintaining the discipline, order, safety, and social environment of the classroom, on top of teaching academic lessons.

Classroom management can be further operationalized into two facets: preventative management and reactive management (Froyen & Iverson, 1999; Lane et al., 2011). Preventative management includes covenant management, which encompasses the management of social dynamics and relationships in the classroom. The social-emotional development of teachers may be particularly important for covenant management as it involves having the social awareness and relationship skills to manage the social aspects of a classroom. Reactive management, on the other hand, consists mainly of disciplinary actions (i.e., conduct management), in reaction to unwanted student behaviour. This includes the constant evaluation of student behaviour as well as redirecting students' actions and attention to a more appropriate focus. Both preventative and reactive management are instrumental to maintaining an appropriate learning environment for students.

Preventative Management and Teachers' Emotions

While discipline may be the first thing that many people think of with regard to classroom management, it is critical not to discount the importance of creating a suitable social classroom environment. The goal of preventative management is to maintain the environment of the classroom in a way that prevents any issues that may interfere with successful learning for

students. Covenant management is an important component of preventative management as it describes the creation and maintenance of the social environment in classrooms (Froyen & Iverson, 1999). The social climate of a classroom is important for both students and teachers as it is related with student academic achievement and mental wellbeing (Wang et al., 2020), as well as the wellbeing and job satisfaction of teachers (Virtanen et al., 2019). Clearly, a key part of creating a positive and suitable learning environment includes maintaining the social climate.

In consideration of covenant management, it is important for teachers to be aware of the manner in which they interact with their students. One factor that may be very influential for the social environment of classrooms are teachers' emotions. Indeed, it has been suggested that teachers' emotions are a critical factor in classroom management due to transmission effects and how emotions can influence behaviour (Frenzel et al., 2021; Frenzel et al., 2023). Emotions are highly important at an interpersonal level, as research on emotional contagion and emotion transmission demonstrates that the emotions of one person can influence how another person feels (Elfenbein, 2014; Parkinson, 2011). For instance, a teacher who expresses anger frequently may find that their students become angry in return, whereas showing more positive emotions may result in students displaying positive emotions as well. This is key as emotions are an integral part of social climates (Allodi, 2010; Derakhshan et al., 2022; Erdil & Ertosun, 2011). Even among online classrooms, teachers report that promoting positive emotions is important in creating a suitable learning environment (Wang et al., 2021).

Therefore, the emotions that teachers experience while teaching may be quite influential in creating and maintaining the social climate of the classroom. Due to the aforementioned evidence supporting the influential power of teachers' classroom-related emotions, the current study examined teachers' emotions as a key factor of classroom management.

Reactive Management and Discipline Styles

Alongside managing the social environment of the classroom, it is also important to manage students' behaviours and actions. The goal of reactive management is to respond appropriately to various situations in the classroom to maintain order (Froyen & Iverson, 1999). As disciplinary practices are the main component of reactive classroom management, the way in which teachers discipline their students is a crucial component in how they manage their classrooms.

In a study of elementary students' perspectives on teachers' discipline styles, Lewis (2001) discovered that students generally report that teachers either use coercive- or relationship-oriented discipline strategies. Teachers who were deemed coercive-oriented depended mainly on punishment and yelling to discipline their students whereas teachers who were relationship-oriented engaged in discussions with their students, recognized appropriate behaviour, used hinting to redirect misbehaviour, and only used appropriate punishment when necessary. Relationship-oriented discipline styles were associated with higher levels of responsibility among students and lower levels of distractibility. Furthermore, Roache and Lewis (2011) found that discussion and hinting (i.e., strategies aligning with relationship-oriented discipline) were positively associated with students' sense of school connectedness, whereas aggression was negatively associated with school connectedness. Overall, research appears to suggest that discipline styles that are more authoritative, (i.e., relationship-oriented) rather than authoritarian (i.e., aggressive and strict), are associated with more positive outcomes for students including better academic engagement and social competency (Uibu & Kikas, 2014; Walker, 2009). This research demonstrates that it is not simply the presence of discipline in a classroom that is important, but the method and style of discipline which is critical. In light of the importance of

discipline strategies in managing a classroom, the current research examined discipline style as a key factor of classroom management.

Classroom Management and Social-Emotional Competence

Teaching involves many tasks that are highly social and emotional in nature, and classroom management is no exception. Classroom management is argued to be strongly connected with the social-emotional development of teachers, as it involves skills such as understanding social contexts, making responsible decisions, and managing behaviors and emotions (Jennings & Greenberg, 2009). While not directly studied, there is some empirical evidence that supports this notion. For instance, one study found that teachers with more developed emotional skills were more likely to be effective in classroom management (Valente et al., 2019). This research is supported by other findings that emotional intelligence is related to classroom management skills (Kanbur & Kirikkaleli, 2023; Valente et al., 2020). More specifically, this paper considers teachers' emotions and discipline styles as key factors of classroom management, both of which appear to be related to social-emotional development.

Emotions, in particular, are central to the SEL framework as emotional development involves understanding, recognizing, and managing one's own emotions as well as being aware and considerate of the emotions of others (CASEL, 2020). Therefore, it is likely that teachers with higher SEC are better able to manage their emotions, which may manifest as feeling more positive emotions with regards to teaching. Empirical evidence supports this assumption as Maior and colleagues (2020) found that higher levels of social and emotional competencies in teachers predicted less emotional exhaustion, which is caused primarily by persistent negative emotions (Seidler et al., 2014). Unfortunately, literature on the impacts of SEL on teachers' emotions is somewhat limited. However, research does demonstrate that SEL broadly impacts

emotional experiences in a positive way. Specifically, research consistently finds that SEL programs and facilitation result in a decrease of emotional distress, and an increase in positive attitudes and emotions among students and youth (Greenberg et al., 2017; Mahoney, et al., 2018; Merrell et al., 2008; Payton et al., 2008). Therefore, while there has yet to be a study that specifically examines how social-emotional competence may influence teachers' classroom emotions, there is strong evidence that SEL generally promotes positive affectivity.

Teachers' discipline styles are also likely to be influenced by their social-emotional competence. As previously discussed, authoritative discipline styles, characterized by using strategies that are firm, fair and relationship-oriented, have been associated with more desirable outcomes for students (Bassett & Synder, 2013; Walker, 2009). SEL competencies such as social awareness and relationship skills may be foundational in this discipline style, as they involve important skills including effective communication, problem solving and constructive conflict resolution (CASEL, 2020). These skills are also involved in authoritative discipline strategies (Uibu & Kikas, 2014); thus, it is possible that teachers with higher SEC would be more likely to use this manner of discipline. There is a lack of empirical studies that specifically investigate the association between teachers' SEC and discipline styles, but there is related evidence that supports the connection between them. For instance, one study found that teachers with higher emotional intelligence use more constructive discipline strategies to manage conflict with students (Jeloudar et al., 2011). This may indicate that teachers who are better able to manage their own emotions, as well as understand their students' emotions, are more likely to choose more authoritative discipline strategies. Furthermore, it has been suggested that SEL is instrumental in effective conflict resolution (Jones, 2004), which is an important component of classroom discipline (Morris-Rothschild & Brassard 2006). Therefore, while it has not yet been

investigated empirically, it is likely that teachers' discipline practices are related to their SEL competencies.

The previous literature outlines compelling evidence that the social-emotional competence of teachers may be influential for teachers' emotions and discipline styles, both of which are key components to classroom management (Lewis, 2001; Sutton et al., 2009). This is important to further explore as classroom management is a critical part of building and maintaining a positive and appropriate learning environment (Djigic & Stojiljkovic, 2011; Jennings & Greenberg, 2009) and may impact various classroom outcomes (Korpershoek et al., 2016; Oliver et al., 2011; Ozdemir, 2007).

Shared Outcomes of Classroom Management Factors and Teachers' SEC

The aforementioned connection between teachers' SEC and their emotions and discipline styles is especially interesting when considering that they appear to share multiple outcomes. In particular, the existing literature on teachers' SEC points to a few key outcomes including less teacher burnout (Kim et al., 2021; Oliveira et al., 2021), more positive student-teacher relationships (Fitgerald et al., 2022; Sandilos et al., 2023), and more positive student behaviour (Nizielski et al., 2012; Poulou, 2017), as previously discussed. Importantly, there is also evidence that these outcomes are related to factors of classroom management.

For instance, research indicates that higher classroom management efficacy is related to lower levels of burnout (Aloe et al., 2014). This suggests that teachers may be able to prevent or lessen their experiences of burnout through effective classroom management. Teachers' classroom emotions may be an especially important factor of classroom management in reducing or preventing burnout, due to emotional exhaustion being a core component of burnout (Seidler et al., 2014). Research indicates that negative emotions, such as anger, can lead to emotional

exhaustion (Keller et al., 2014; Carson, 2006), thus, feeling positive emotions in association with teaching may help protect teachers against burnout. Indeed, one study found that enthusiasm among teachers was negatively associated with burnout (Kunter et al., 2011). Further support for the connection between teachers' classroom emotions and burnout comes from literature on workplace emotions in general, which consistently demonstrates that feeling positive emotions (e.g., enjoyment) while at work is connected with reduced experiences of burnout (Correa et al., 2019; Lee et al., 2021; Plester & Hutchison, 2016). Therefore, while it has not been specifically examined among teachers, there is evidence that points to emotions being a critical factor of burnout.

As emotions are key in social interactions (Elfenbein, 2014; Parkinson, 2011), it is also likely that teachers' classroom emotions are important in establishing and maintaining positive student-teacher relationships. Research examining the relationship between teacher emotions and student-teacher relationships has found that higher levels of positive emotions and lower levels of negative emotions were related to stronger relationships between students and their teachers (Goetz et al., 2021). As previously mentioned, it is likely that teachers' emotions influence those of students through emotional contagion (Parkinson, 2011), which may impact the quality of student-teacher relationships. For instance, Karabay (2017) found that teachers' positive emotions were associated with more positive relationships between students and teachers. The power of emotions seems to be something that teachers are aware of themselves, as many report trying to manage negative emotions and enhance positive emotions as they believe it helps them maintain interpersonal relationships (Sutton & Harper, 2009; Sutton & Knight, 2006b). Teachers' discipline styles have also been found to be associated with how positive student teacher relationships are. Specifically, more positive or authoritative styles of discipline

are related to more positive student perceptions of their teachers (De Jong et al., 2014). Since authoritative discipline styles are characterized by high levels of warmth and place value of student-teacher interactions (Uibu & Kikas, 2014; Walker, 2008), it is perhaps unsurprising that such style of discipline would promote more positive student-teacher relationships. Taken together, the evidence in the literature suggests that both teachers' discipline style and classroom emotions are important factors in building quality student-teacher relationships.

One of the most common challenges for teachers is dealing with unwanted student behaviour (Demir, 2009; Pane, 2010). Behaviour that may be unwelcome includes disruptive behavior in the classroom such as speaking out of turn and wandering around the classroom at inappropriate times (Briesch et al., 2015; Postholm, 2013; Sun & Shek, 2012). Not only is disruptive behavior a burden for teachers, but it has negative effects for other students as it disrupts the learning environment (Sun & Shek, 2012). Classroom management is thought to be a crucial component in understanding the behavior of students (Oliver et al., 2011; Wills et al., 2019;). Further, as conduct management is a main component of overall classroom management (Froyen & Everson, 1999), it can be assumed that one of the main goals in managing a classroom is to quelle challenging behavior and encourage more appropriate behaviors among students. Empirical evidence supports the importance of classroom management as studies show that higher perceived self-efficacy in classroom management is related to less disruptive student behavior (Lopes et al., 2017). Furthermore, the style of discipline that teachers engage in may impact student behavior differentially. For instance, Lewis (2001) found that authoritative discipline styles were associated with less challenging student behavior. Furthermore, aggressive discipline styles are associated with more disruptive student behavior (Lewis et al., 2005). Taken

together, this suggests that discipline styles that are more relationship-oriented and less aggressive may be more beneficial in reducing incidents of unwanted student behavior.

The previous evidence suggests that classroom management and teachers' SEC may be directly related as well as share multiple common outcomes. However, there has yet to be an exploration as to how all of these variables fit together. It is important to further investigate these relationships to better understand the roles that teachers' SEC and classroom management play for these important student and teacher outcomes.

Teachers' Emotions and Discipline Styles as Mediators

The previous evidence that burnout, student-teacher relationships, and student behaviour are influenced by teachers' emotions and discipline styles alongside teachers' SEC indicates further need to investigate the relationships between all of these variables. The importance of considering these relationships amplifies when also considering the evidence that teacher's emotions and discipline styles are also influenced by teachers' SEC. Together, this points to the potential for emotions and discipline styles of teachers to mediate the relationships between teachers' SEC and the aforementioned classroom outcomes. In other words, it is possible that teachers' social-emotional skills have indirect impacts on burnout, student-teacher relationships, and student-behaviour through the impact it has on teachers' emotions and discipline styles. This has not yet been investigated empirically; however, Jennings and Greenberg (2009) posit a model that is similar in that classroom management acts as a conduit for the effects of SEL onto the classroom environment. It is important to examine the potential roles of teachers' emotions and discipline styles as mediators between their social-emotional skills and classroom outcomes as this will further the understanding of how and why teachers' SEC may impact the classroom.

The Present Study

Existing literature on the potential benefits of teachers' social-emotional competence (SEC) is optimistic yet understudied. As previously discussed, there is some evidence that teachers' SEC may be important in reducing burnout, building positive student-teacher relationships, and encouraging more positive student behaviour. Key classroom management factors of emotions and discipline styles have the potential to mediate these relationships as they share these outcomes and may also be influenced by teachers' SEC. However, there has yet to be an examination of how these classroom management factors may act as mediators between teachers' social-emotional competence and student and teacher outcomes. It is important to investigate this to better understand how teachers' SEC may impact themselves, their students, and their classrooms.

Therefore, the present study aims to fill this gap in knowledge by assessing a few key research questions (RQs):

(RQ1) Does teachers' social-emotional competence predict teachers' emotions and discipline styles? (RQ2) Is the social-emotional competence of teachers related to burnout, student-teacher relationships, and student behaviour? (RQ3) Are teachers' emotions and discipline styles related to burnout, student-teacher relationships, and student behaviour? (RQ4) Do teachers' emotions and discipline styles mediate the relationship between teachers' SEC and the outcomes of interest?

Subsequently, the hypotheses (Hs) for this research were as follows: (H1) Higher social-emotional competence among teachers would predict more positive emotions and more authoritative discipline styles. (H2) Higher levels of teachers' social-emotional competence would predict less burnout, more positive student-teacher relationships, and more positive

student behaviour. (H3) More positive emotions would predict less burnout and more positive

student-teacher relationships, and more authoritative discipline styles would predict more

positive student-teacher relationships and more positive student behaviour. (H4) Teachers'

emotions would partially mediate the effects of teachers' SEC on burnout and student-teacher

relationships, and teachers' discipline style would partially mediate the effects of teachers' SEC

on student behaviour and student-teacher relationships.

<div align="center">

Method

</div>

Participants

The participants for this research included 123 elementary school teachers in Canada,

aged 24 to 61 years old ($M = 38.47$, $SD = 9.38$). Participants had an average of 11 years of

teaching experience ($SD = 8.28$), and the majority of the sample identified as female (81%),

heterosexual (88.6%), and white (61.8%). A full summary of the demographic information is

reported in Table 1.

Table 1

The Demographic Information of Participants

Demographic Category	Range (Years)	Mean (Years)	Standard Deviation
Age	24-61	38.47	9.38
Years of Teaching	0-36	11.74	8.28
		Number of Cases	Percentage of Sample (%)
Gender			
Female	100	81.3	
Male	16	13	

	Non-Binary	0	0
	Other	0	0
	Prefer not to answer	3	2.5
	Missing	4	3.3
Sexuality			
	Heterosexual	109	88.6
	Homosexual	5	4.1
	Bisexual	3	2.4
	Other	0	0
	Prefer not to answer	2	1.6
	Missing	4	3.3
Ethnic/Cultural Identity			
	White or Caucasian	76	61.8
	Canadian	7	5.7
	Jewish	3	2.4
	Mixed Race	3	2.4
	Indigenous	1	0.8
	African American	1	0.8
	Latin-American	1	0.8
	Asian	2	1.6
	Middle Eastern	1	0.8
	Unknown/no response	28	22.8

Note. The question on ethnic and cultural identity used open-text responses, thus there were various different responses. The reported ethnic/cultural identities were coded based on similar responses given by participants.

Procedure

Ethical approval for this study was granted by the University's Ethics Board. To recruit participants, advertisements of the study were posted on Facebook pages that were geared towards elementary school teachers in Canada. Schoolboards across Canada were also contacted to request distribution of the study advertisement to their teachers. Participation was entirely voluntary and took the form of completing a 15-20-minute online survey. To access the survey, participants first had to read an information and consent letter and indicate that they consented to participate in the study. The survey included six standardized measures as well as five demographic questions. As incentive and compensation for participating, there was a gift-card draw where participants could enter to win one of ten $25 Amazon gift cards.

Measures

The Social Emotional Competency Teacher Rating Scale

To assess the level of teachers' social and emotional competence, the Social Emotional Competency Teacher Rating Scale (Tom, 2012) was used. This scale consists of 25 questions that ask teachers to indicate the extent to which they agree with statements about their social emotional competencies in the classroom setting. Specifically, this scale measures teacher-student relationships, emotion-regulation, social-awareness, and interpersonal relationships. There are 6 response options that range from 1 ("*Strongly Disagree*") to 6 ("*Strongly Agree*"). A sample item is "I remain calm when addressing student misbehavior." Higher scores on this scale indicated higher levels of social-emotional competence. The overall measure reported excellent

reliability with a Cronbach's alpha of .898. Exploratory factor analysis (EFA) was conducted and demonstrated that most of the items had acceptable loadings ranging from .38 to .71, based on a cut off of .30 or higher (Hair et al., 1998). However, the loading of item 2 was below the acceptable threshold (.21) and was thus removed for subsequent analyses.

A confirmatory factor analysis (CFA) was conducted as well. To assess for model fit, three main indices were examined: the Root Mean Square Error of Approximation (RMSEA), the Standardized Root Mean Square Residual (SRMR) and the Comparative Fit Index (CFI). RMSEA values < .06 indicate good model fit (Hu & Bentler, 1999), but values smaller than .09 are considered acceptable (Marsh et al., 2004). Furthermore, SRMR values < .10 are considered indicative of good model fit, and CFI values between .80 and .89 are considered acceptable (Knight et al., 1994; Brown, 2015; Hu & Bentler, 1999). Considering these criteria, model fit indices demonstrated overall poor fit, χ^2 (246) = 529.23, p < .001, CFI = .738, RMSEA = .097 [90% CI = .085, .108], SRMR = .086.

Teachers Emotion Scale

To measure teachers' classroom emotions, the Teacher Emotion Scale (Frenzel et al., 2016) was used. There are 12 questions in this scale, which asks teachers to indicate how strongly they agree with each statement about their emotional states related to teaching. Answers are measured on a 4-point scale ranging from 1 ("*Strongly Disagree*") to 4 ("*Strongly Agree*"), with higher scores reflecting more positive emotions. Specifically, this scale asks teachers to indicate how strongly they feel enjoyment, anger, and anxiety while they teach. A sample item from this measure is "I generally enjoy teaching." The overall Cronbach's alpha for this scale is .853, demonstrating excellent reliability. EFA demonstrated that all 12 items had acceptable factor loadings ranging from .379 to .717, thus all items were retained. A CFA was also

conducted, and the model fit indices demonstrated overall acceptable fit, $\chi^2(51) = 121.90$, $p <$ .001, CFI = .858, RMSEA = .106 [90% CI = .082, .131], SRMR = .069.

Classroom Discipline Questionnaire

A questionnaire developed by Lewis (2001) was used to measure teachers' classroom discipline strategies. There are 24 questions in the questionnaire that ask teachers to indicate how frequently they use various discipline strategies. Specifically, this questionnaire asks about teachers' use of punishment, recognition and rewards, hinting, discussion, aggression, and involvement. The questionnaire uses a 5-point response scale ranging from 1 ("*Never*") to 5 ("*Nearly all of the time*"). More authoritative discipline styles are reflected by higher scores on this scale. The original questionnaire was created to use among a sample of students, so the items were modified slightly to be more appropriate among a sample of teachers. For example, an original item was "Increases the level of consequence if a misbehaving student argues," and it was modified to "Increase the level of consequence if a misbehaving student argues." This questionnaire has been widely used in research examining teachers' discipline strategies (e.g., De Jong et al., 2013; Khodarahmi et al., 2014; Rahimi & Hosseini, 2011). The overall scale shows good reliability with a Cronbach's alpha of .775. EFA was conducted and revealed that eight of the items (i.e., 1, 2, 3, 4, 9, 12, 19, 22) demonstrated poor factor loadings and were therefore removed for subsequent analyses. The remaining 17 items loaded well (ranging from .309 to .756) and were retained. Furthermore, results from a CFA demonstrate overall acceptable fit, χ^2 (94) = 160.789, $p <$ .001, CFI = .901, RMSEA = .076 [90% CI = .055, .096], SRMR = .084.

Student-Teacher Relationships Scale

Student teacher relationships were measured using the Student-Teacher Relationship Scale (STRS; Pianta, 2001). There are 27 questions in this scale which ask teachers to indicate

how true various statements are about their student-teacher relationships. Answers are recorded on a 5-point scale ranging from 1 ("*Definitely does not apply*") to 5 ("*Definitely Applies*"). Higher scores indicate more positive student-teacher relationships. Specifically, this scale measures the levels of closeness, conflict, and dependency that are present in student-teacher relationships. More positive student-teacher relationships are reflected by higher scores. The STRS has been used in various other studies (e.g., Vandenbroucke et al., 2017; Verschuren, 2015), and demonstrates excellent reliability (Cronbach's alpha = .897). The original scale asked teachers to assess their relationship with each individual student in their classroom. In consideration of the feasibility of this project, minor modifications were made to the items to ask about teachers' relationship with their class as a whole rather than individual students. An example of a modification is changing "I share an affectionate, warm relationship with this child." to "I share an affectionate, warm relationship with these children." EFA revealed that items 6, 7, 20, 24, and 26 had poor factor loadings and were therefore removed for subsequent analyses. The remaining 22 items demonstrated acceptable factor loadings (.317 to .794). A CFA was conducted, and model fit indices demonstrated overall marginal fit, $\chi^2 (227) = 375.33$, $p < .001$, CFI = .877, RMSEA = .073 [90% CI = .060, .086], SRMR = .083.

Maslach Burnout Inventory – Educators Survey

To assess the level of teacher burnout, the Maslach Burnout Inventory – Educators Survey (MBI-ES; Maslach et al., 1996) was used. This measurement has 22 questions which ask teachers to indicate the frequency of experiencing burnout symptoms. Specifically, the MBI-ES measures emotional exhaustion, depersonalization, and personal accomplishment. Answers are recorded on a 7-point scale ranging from 0 ("*Never*") to 6 ("*Daily*"), with higher scores reflecting higher levels of burnout. A sample item is "I feel emotionally drained from my work." This scale

reports a Cronbach's alpha of .982 and is widely used to measure burnout among teachers (e.g.,

Jennings & Greenberg, 2009; Saloviita & Pakarinen, 2021). EFA was conducted and

demonstrated acceptable factor loadings for most of the items (ranging from .345 to .756).

However, there were four items (i.e., 1, 4, 13, 21) which had factor loadings lower than the .300

cut off, and were thus removed, leaving 18 items remaining. A CFA was unable to be conducted

for this measure due to a lack of convergence, even after using more robust estimators (i.e.,

MLR, WLSMV) and increasing the iterations up to 10000.

Teacher Observation of Classroom Adaptation – Checklist

Students' classroom behaviours were assessed using the Teacher Observation of

Classroom Adaptation – Checklist (TOCA-C; Leaf et al., 2002). This measure consists of 21

questions which ask teachers to indicate how often various statements of student behaviours are

true. There is a 6-point response scale that ranges from 1 ("*Never*") to 6 ("*Almost Always*").

Higher scores indicate more positive behaviour. The measurement assesses 3 factors:

concentration problems, disruptive behaviors, and prosocial behaviours. This scale reports

excellent reliability (Cronbach's alpha = .869). As with the STRS, this measure originally asked

about individual student behaviour, so modifications were made to ask about classroom

behaviours in general. An example of a modification is changing "Shows empathy and

compassion" to "Show empathy and compassion". Furthermore, one of the original items "Is

rejected by others" was excluded from the measure for this study as there was not a clear way to

modify this item to make it apply to the whole classroom without compromising its original

intent. Therefore, the measure used in the current study was 20 items long. Exploratory factor

analysis revealed that all items demonstrated acceptable factor loadings ranging from .437 to

.748, thus all items were kept for following analyses. A CFA was conducted, and model fit

indices demonstrated overall acceptable fit, χ^2 (149) = 311.82, p < .001, CFI = .873, RMSEA = .094 [90% CI = .080, .109], SRMR = .075.

Analytical Plan

Prior to the main analysis, preliminary analyses were conducted using SPSS (Version 29) (IBM Corp, 2023). Specifically, data were screened for violations in inferential statistics assumptions, and correlations, reliability analyses, and descriptive statistics were assessed. To address the research questions of this study, mediational path analysis was conducted using MPlus 8.6 (Muthén & Muthén, Los Angeles, CA, USA). This model assessed the potential of teachers' emotions and discipline styles to mediate between teachers' social-emotional competencies and three outcomes: teacher burnout, student-teacher relationships, and student behaviour. Specifically, the model examined the direct effect of SEC on teacher's emotions and discipline styles, the direct effect of teachers' SEC and classroom management factors on these outcomes, and the indirect effect of teachers' SEC on the outcomes through the classroom management factors. As the current sample size fell short of the recommended quota of 200 participants to conduct these analyses (Boomsma, 1982; Hoe, 2008), bootstrapping with 5000 resampling was performed, using 95% confidence intervals to evaluate the significance of the indirect effects of the model, following recommendations from Preacher and Hayes (2008). Figure 1 demonstrates the hypothesized model that was examined.

Figure 1

Hypothesized Model of the Relationships Between the Variables of Interest
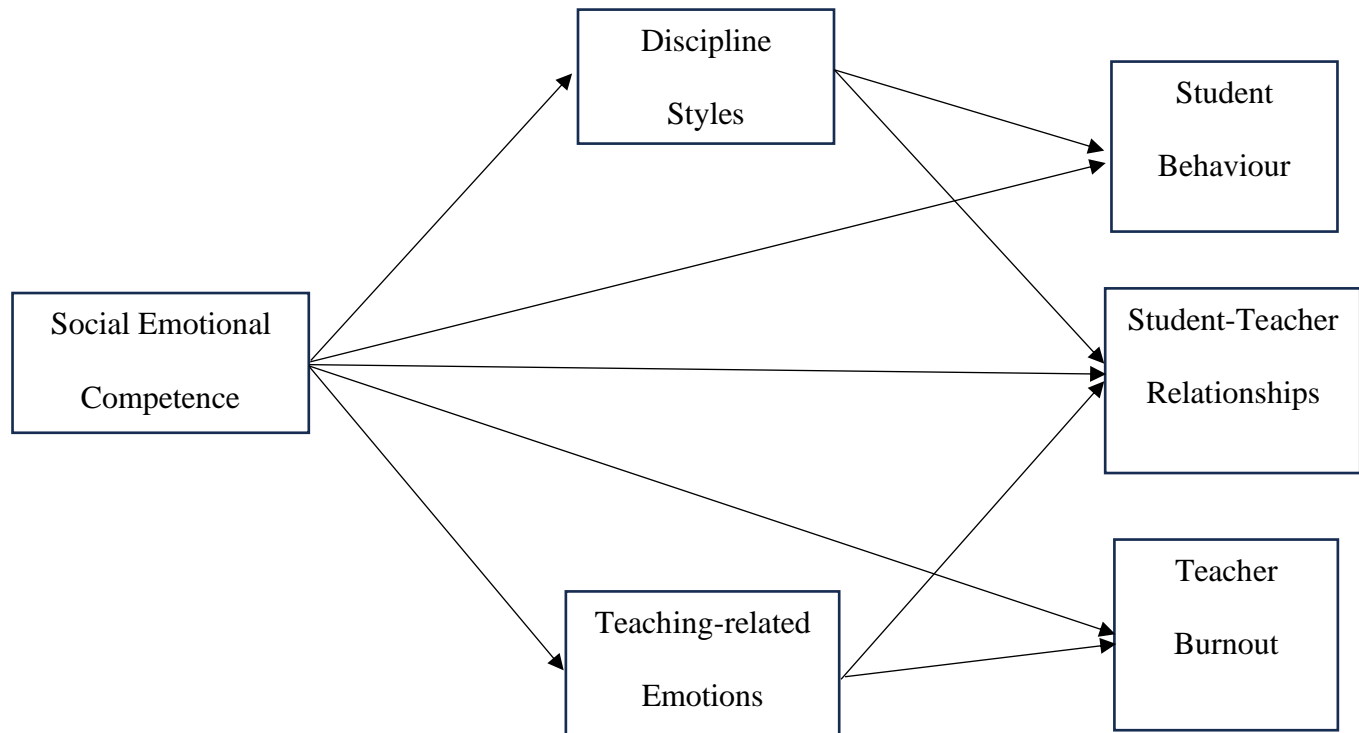
Results

Assumption Checks

Prior to conducting the main analyses, SPSS 29 was used to assess whether there were any assumptions of inferential statistics which were violated. First, normality was assessed using histograms and by evaluating the values of skewness and kurtosis. Histograms did not show signs of skewness for any of the variables, and this was further supported as the values for skewness and kurtosis were within acceptable ranges for every variable (i.e., Skewness less than ± 2; Kurtosis less than ± 7; Kline, 2016). Therefore, the assumption of normality was considered to be met. Furthermore, there were no multivariate or univariate outliers detected, assessed using Mahalanobis distance and z-scores (cut off of ± 3.29), respectively (Tabachnick & Fidell, 2019).

Scatterplots were examined to assess for linearity between variables as well as for homoscedasticity. A linear relationship was observed between the variables, and sufficient homoscedasticity was indicated. Furthermore, the correlation matrix and VIF values were used to assess for multicollinearity. As none of the predicter variables were very highly correlated (none of the rs surpassing .677), and all of the VIF values were less than 10, the multicollinearity assumption was considered to be met (Kline, 2016). Lastly, 0.462% of the total observations were missing. Specifically, there were missing data in 21.970% of the variables, ranging from 0.8% to 2.4%. As guidelines suggest that less than 5% of missing data is inconsequential (Schafer, 1999), the present amount of missing data is considered acceptable.

Preliminary Analyses

Descriptive statistics were also conducted prior to the main analyses (see Table 2). Generally, participants reported high levels of social-emotional competence ($M = 4.83$, $SD = 0.55$), high levels of positive emotions ($M = 3.06$, $SD = 0.45$), moderate to high levels of authoritative discipline styles ($M = 3.84$, $SD = 0.49$), low levels of burnout ($M = 2.80$, $SD = 0.82$), moderate to high levels of positive student-teacher relationships ($M = 3.86$, $SD = 0.61$), and high levels of positive student behaviour ($M = 4.31$, $SD = 0.65$). As expected, teachers' social and emotional competence were significantly related to each of the classroom management factors: emotions ($r = .677$, $p < .001$) and discipline style ($r = .645$, $p < .001$). In addition, SEC was significantly related to each of the classroom outcomes: burnout ($r = -.466$, $p < .001$), student-teacher relationships ($r = .756$, $p < .001$), and student behaviour ($r = .427$, $p < .001$). These outcomes were also significantly related to the classroom management factors. Specifically, teachers' emotions were positively related to student-teacher relationships ($r = .702$, $p < .001$) and student-behaviour ($r = .589$, $p < .001$) and negatively to burnout ($r = -.650$, $p <$

.001). Teachers' discipline styles also shared similar relationships with student-teacher relationships ($r = .626$, $p < .001$), student-behaviour ($r = .588$, $p < .001$) and burnout ($r = -.518$, $p < .001$).

Table 2

Descriptive Statistics and Correlations Between All Variables

	SEC	EMO	DIS	BURN	STR	BEH
SEC	--					
EMO	.677*	--				
DIS	.645*	.609*	--			
BURN	-.466*	-.650*	-.518*	--		
STR	.756*	.702*	.626*	-.541*	--	
BEH	.427*	.589*	.588*	-.636*	.535*	--
mean	4.83	3.06	3.84	2.80	3.86	4.31
SD	0.55	0.45	0.49	0.82	0.61	0.65

Note. SEC = social emotional competence, EMO = teaching-related emotions, DIS = discipline style, BURN = burnout, STR = student-teacher relationships, BEH = student behaviour.

*$p < .001$

Path Analysis

The main analysis of this study was an over identified mediational path analysis that examined the relationships between teachers' SEC, teaching-related emotions, discipline styles, burnout, student-teacher relationships, and student behaviour. Specifically, teachers' social-emotional competence was treated as the exogenous variable, teachers' emotions and discipline styles were the mediators, and teacher burnout, student-teacher relationships, and student

behaviour were the endogenous variables. A CFA was conducted and the model fit indices for this path analysis demonstrated overall poor fit: $\chi^2(3) = 36.679$, $p < .001$, CFI = .922, RMSEA = .302 [90% CI = .219, .393], SRMR = .102.

The results demonstrated that teachers' SEC significantly and positively related to both teachers' emotions ($\beta = .677$, $p < .001$) and teachers' discipline styles ($\beta = .645$, $p < .001$). This indicates that teachers with higher SEC are more likely to have more positive teaching-related emotions and use more authoritative discipline styles. In turn, teachers' emotions were significantly positively associated with student-teacher relationships ($\beta = .571$, $p = .004$), and negatively associated with burnout ($\beta = -.487$, $p < .001$). Teachers' discipline styles were positively associated with student behaviour ($\beta = .456$, $p < .001$), but did not have a connection with student-teacher relationships ($\beta = .141$, $p = .064$). These results indicate that teachers who scored higher in positive emotions were more likely to experience less burnout and have more positive student-teacher relationships, and teachers who used more authoritative discipline styles were more likely to observe more positive behaviour among students.

Furthermore, teachers' SEC had significant and positive total effects on student teacher relationships ($\beta = .768$, $p < .001$) and student behaviour ($\beta = .438$, $p < .001$), and a significant negative total effect on burnout ($\beta = -.481$, $p < .001$). Indirect effects were assessed using bootstrapped 95% confidence intervals. Results indicate that SEC had a positive indirect effect on student-teacher relationships through teachers' emotions ($\beta = .174$, $p = .005$, 95% CI [.055, .296]), and a negative indirect effect on burnout ($\beta = -.330$, $p < .001$, 95% CI [-.482, -.160]) through teachers' emotions. There was also a positive indirect effect of SEC on student behaviour ($\beta = .294$, $p = .001$, 95% CI [.170, .444) through teachers' discipline styles. However, there was no significant indirect effect on student-teacher relationships through discipline styles

(β = .091, p = .069, 95% CI [.000, .199]). Furthermore, as there was a significant direct effect of

teachers' SEC on student-teacher relationships (β = .502, p < .001, 95% CI [.345, .652]), but not

on burnout (β = -.151, p = .155, 95% CI [-.357, .053]), the results indicate that emotions partially

mediated the effects of teachers' SEC on student-teacher relationships but fully mediated the

relationship between teachers' SEC and burnout. It also appears that teachers' discipline styles

fully mediated the relationship between SEC and student behaviour as there was not a significant

direct effect of teachers' SEC on student behaviour (β = .143, p = .147, 95% CI [-.062, .326]).

The final model, based on the results, can be seen in Figure 2.

Figure 2

Path Analysis Model with Standardized Coefficients
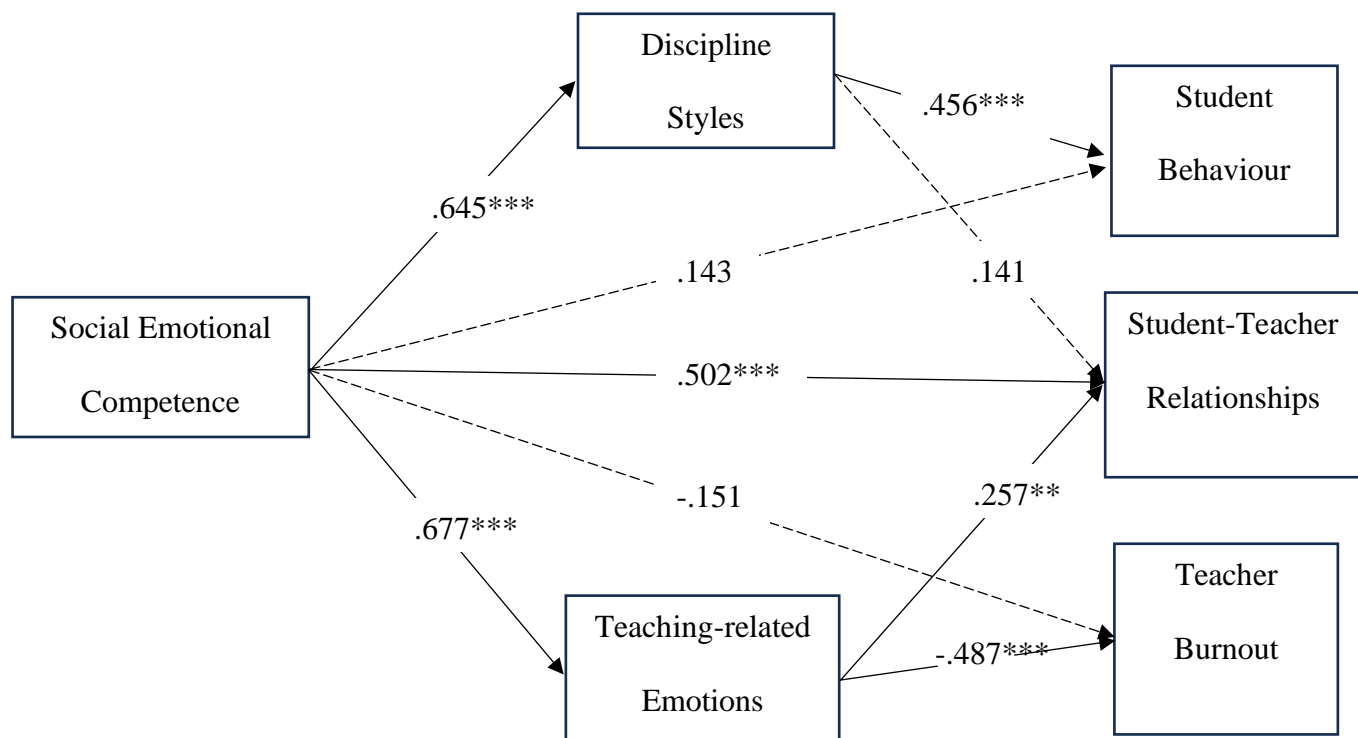
Note. *p < .05, **p < .01, *** p < .001.

Discussion

This study aimed to examine the role of classroom management factors (i.e., teaching-related emotions and discipline styles) as mediators between teachers' SEC and important outcomes for students and teachers (i.e., teacher burnout, student-teacher relationships, and student behaviours). Several questions and hypotheses were addressed in this study which are discussed below.

Teachers' Social-emotional Competence on Classroom Management Factors

The first question of this study was regarding how teachers' SEC may be related to two important factors of classroom management: teachers' emotions and discipline styles. Results indicate that teachers with higher levels of SEC are more likely to feel more positively toward teaching as well as use a more authoritative discipline style in their classrooms. These findings support the first hypothesis of this study, that teachers' SEC would have a positive relationship with both of these factors. The present results are also consistent with previous literature, including studies that demonstrate that higher levels of social emotional competence among teachers is related to less emotional exhaustion (Maior et al., 2020), which is caused primarily by persistent negative emotions (Seidler et al., 2014). Additionally, there is evidence that higher emotional intelligence relates to feeling more positively towards ones' job (Mousavi, 2012; Al-Hamami et al., 2015). The connection between teachers' SEC and authoritative discipline styles are also consistent with literature that outlines various SEL skills as being characteristic of authoritative discipline strategies (Uibu & Kikas, 2012). Overall, these results were expected and are consistent with the SEL framework as it posits that SEL is foundational for effectively managing emotions as well as social situations (such as making discipline decisions) (CASEL, 2020). These findings add to the current literature by directly examining how teachers' social-

emotional development is related to key factors of classroom management. While it has been previously suggested that that SEC is important in classroom management, (Jennings & Greenberg, 2009), it had not been directly investigated prior to this study. Therefore, this study provides some of the first direct evidence that teachers' social-emotional skills are influential in components of classroom management.

Teachers' SEC on Student and Teacher Outcomes

The second question of this study examined how teachers' SEC influenced three important student and teacher outcomes: teacher burnout, student-teacher relationships, and student behaviour. Results indicate that teachers with higher SEC are less likely to experience burnout and more likely to have positive student-teacher relationships and perceive more positive behaviour from their students. These findings are in line with the original hypotheses that higher levels of SEC among teachers would be related to favourable outcomes regarding burnout, student-teacher relationships and student behaviour.

The association between high SEC and lower levels of burnout is unsurprising considering that emotion management is a fundamental skill of SEL (CASEL, 2020), and one of the main components of burnout is emotional exhaustion (Oliveira et al., 2021). Furthermore, numerous studies in previous literature have suggested and demonstrated that social-emotional development among teachers may be associated with lower levels of burnout symptoms (Carvahlo et al., 2017; Castillo et al., 2013; Castillo-Gualda et al., 2017; Han & Weiss, 2005; Flook et al., 2013). Therefore, the current study further reinforces the notion that social-emotional development is associated with reduced experiences of burnout among teachers.

Previous literature is also consistent with the finding that higher levels of teachers' SEC predict more positive student-teacher relationships. Specifically, it was posited that more

developed social-emotional skills in teachers would be associated with more positive

relationships with students (Jennings & Greenberg, 2009). This notion is supported by evidence

that SEL programs for teachers led to more quality relationships with students (Fitzgerald et al.,

2022; Sandilos et al., 2023). However, there was previously a lack of research that directly

investigated how teachers' SEC may be connected to student-teacher relationships. Therefore,

the current study extends and adds to literature concerning both SEL outcomes for teachers, and

factors associated with student-teacher relationships. These findings help support the idea that

SEL for teachers is important in building and maintaining positive relationships with their

students.

Lastly, the findings that teachers' SEC related to more positive student behaviour is

consistent with previous literature that demonstrates a connection between teachers' emotional

intelligence and less disruptive student behaviour (Poulou, 2017; Nizielski et al., 2012). The

results are also consistent with Jenning and Greenberg's (2009) theoretical framework of how

teachers' social-emotional skills would be critical to creating a positive environment, including

promoting prosocial behaviour among students. Importantly, this study provides some of the first

direct empirical evidence that teachers' social-emotional competence may encourage positive

student behaviour in classrooms. This is important as it supports the critical nature of SEL for

teachers.

Classroom Management Factors on Student and Teacher Outcomes

The third question investigated how key factors of classroom management may predict

burnout, student-teacher relationships, and student behaviour. The findings from this study

demonstrate that when teachers feel more positive emotions in relation to teaching, they are less

likely to experience burnout and more likely to have positive relationships with their students.

These results support the related hypotheses of this study and are consistent with previous

literature that demonstrates that emotions are connected to both burnout (e.g., Lee et al., 2021;

Seidler et al., 2014) and relationships (e.g., Frenzel et al., 2021). Specifically, as emotional

exhaustion is a key contributor to burnout, prior research shows that fostering more positive

emotions while managing negative emotions is helpful in reducing experiences of burnout

(Seidler et al., 2014; Keller et al., 2014; Carson, 2006). Further, there are multiple studies that

find that feeling enjoyment in one's workplace is related to less experiences of burnout (Correa

et al., 2019; Lee et al., 2021; Plester & Hutchison, 2016). Therefore, the present findings further

support the previous evidence that emotions are an important factor of burnout and further

extended this notion to teachers specifically. Furthermore, the results that teachers who feel more

positively tend to have more positive relationships with their students reinforce literature that

highlights the important role that teachers' emotions play in fostering a positive social

environment, including building positive relationships with students (Jennings & Greenberg,

2009; Frenzel et al., 2021; Hargreaves, 2000).

Additionally, results suggest that teachers who use more authoritative discipline styles are

more likely to observe more positive behaviours from their students. This relationship was

expected, based on previous literature that suggests that authoritative discipline strategies are

some of the most effective approaches in encouraging positive student behaviour (Skinner et al.,

2005; Walker, 2009; Uibu & Kikas, 2014). Thus, the current results further strengthen the

evidence that authoritative discipline can positively influence how students behave. However,

there was no relationship between teachers' discipline styles and their relationships with their

students. This finding came as a surprise as previous research suggested that authoritative

discipline strategies may foster more positive connections between students and teachers due to

its focus on relationship management (De Jong et al., 2014; Uibu & Kikas, 2011; Walker, 2008). One possible explanation for this result is that the way in which teachers execute discipline strategies matters more to student-teacher relationships that the strategies themselves. For example, hinting is a strategy that is considered as a form of positive discipline (Lewis, 2011), but if teachers use a sarcastic or mocking tone while they use this approach, it may not be beneficial for their relationships with their students. Therefore, it is possible that, when it comes to building close relationships with students, teachers should also focus on the way they use discipline strategies, not just which strategies they choose. Even though the lack of relationship between discipline and student-teacher relationships was unexpected, it still adds to the literature by indicating that further investigation should be pursued to better understand how and if discipline might be used to strengthen relationships between students and teachers.

Classroom Management Factors as Mediators

The last question of this study investigated how teachers' emotions and discipline styles may mediate between SEC and student and teacher outcomes. Results show that teachers' emotions partially mediated the relationship between SEC and student-teacher relationships, and fully mediated between SEC and burnout. This indicates that teachers' emotions are important mechanisms for how their social-emotional competence impacts their relationships and well-being. The finding in relation to student-teacher relationships is supportive of the related hypothesis and suggests that teachers social-emotional skills are influential on relationships through promoting more positive emotions in teachers. This has not been previously studied and thus adds valuable evidence to the literature. Furthermore, the finding in relation to burnout only partially supports the hypothesis as it was expected that emotions would only partially mediate the relationship between teachers' SEC and burnout. While it is unsurprising that emotions are

instrumental in reducing burnout due to emotional exhaustion being one of its key characteristics (Oliveira et al., 2021), it is interesting that it appears to account fully for the impacts of social-emotional competence on burnout, as there are two other main symptoms of burnout: depersonalization and personal accomplishment (Maslach et al., 2001; Maslach & Leiter, 2016). Based on the current findings, it is possible that emotions are also important for these two symptoms, thus emotional management may be effective in reducing burnout in general.

Furthermore, teachers' discipline styles fully mediated the relationship between teachers' SEC and students' behaviour. While it was expected that teachers' discipline styles would act as a mediator between these two variables, it was not expected to fully mediate the relationship. These is an interesting finding as it suggests that teachers' discipline styles are crucial for translating the impacts of their own social-emotional development. Research demonstrates that student behaviour is often complex and may be impacted by various teacher-related factors outside of discipline, including students' relationships with teachers (Baker et al., 2008; Longobardi et al., 2021) and teachers' own behaviours (Cheung, 2019) and attitudes (Demanet & Van Houtte, 2012). Therefore, the present finding that discipline may fully mediate the relationship between teachers' SEC and student behaviour is critical and may suggest that authoritative discipline styles involve various contributing factors to prosocial student behaviour. Due to its vital role in mediating the effects of teachers' SEC, teachers' discipline styles should be further investigated. Lastly, teachers' discipline styles did not mediate between teachers' SEC and student-teacher relationships. This was contrary to the original hypothesis and appears to be due to a lack of connection between discipline and student teacher-relationships. As discussed in the previous section, this indicates that there may be more complexity to any influence that discipline may have on student-teacher relationships, beyond simply the chosen methods.

Together, these findings provide new insights into how teachers' social-emotional competence may make an impact. As it had not been previously studied, this research helps to fill a gap in understanding key mechanisms through which teachers' SEC influences themselves, their students, and their classrooms. Specifically, this provides evidence that factors of classroom management may act as a conduit through which teachers' social and emotional skills speak. This research points in an optimistic direction for the growing attention to SEL for teachers.

Implications for SEL-based Programs and Training for Teachers

Overall, this study has provided important evidence that teachers' social-emotional skills are important for teachers, students, and the classroom climate. SEL has long been promoted among students, with teachers involved almost exclusively as the facilitators. However, this research demonstrates why it is important to promote the development of social-emotional skills for educators as well. The results from this study show strong associations between the social-emotional skills of teachers and important outcomes. For instance, burnout is a globally prevalent issue for teachers (Iancu et al., 2018) and can have detrimental personal and professional impacts (Maslach & Leiter, 2016), so it is important to understand how to properly prevent and intervene in experiences of burnout. As this study demonstrated that teachers' SEC is significantly related to reduced burnout experiences, it may be important to consider SEL in creating interventions that target burnout among teachers. Similarly, efforts to improve student behaviour and student-teacher relationships may benefit from promoting the development of teachers' social and emotional skills.

With specific consideration of the mediation results from this study, it may be especially beneficial for workshops or trainings that are focused on classroom management to include components of SEL. As this research demonstrates, teachers' social-emotional competence is

important for key factors of classroom management, which are in turn important for various classroom outcomes. Therefore, to encourage effective management of classrooms that leads to less burnout, better relationships with students, and more positive student behaviour, SEL should be a consideration in the creation and implementation of trainings and programs geared toward classroom management skills.

Furthermore, the results of this study generally highlight the importance of promoting SEL for teachers. While the area is still relatively new, there are a few programs and interventions that have been developed which specifically target teachers' SEC. One such program is called 'Tuning in to Kids in School' (TIK-S), which focuses on emotion coaching skilled to develop teachers' emotional competence and emotion socialization abilities (Bolstad et al., 2023). This program showed promising results with regard to teachers' social-emotional skills in a pilot study investigating its efficacy (Bolstad et al., 2023). The Cultivating Awareness and Resilience in Education (CARE) program is another program that aims to promote social-emotional development among teachers and has also shown some optimistic results (Jennings et al., 2019). The recent efforts of developing programs to promote the social-emotional skills of teachers is encouraging, however there is little consistency between these programs with regard to their approach and content (Wigelsworth et al., 2016), making it difficult to have a comprehensive understanding of the efficacy of these programs as a whole (Oliviera et al., 2021). All together, this demonstrates that there is still a need to investigate programs which target the development of social-emotional skills for teachers. The present research not only reinforces how essential such programs are for educators, but also calls for their further development and implementation.

A particularly promising avenue to further explore is how to integrate SEL education for pre-service teachers. By integrating high-quality and holistic SEL facilitation into teacher training programs, this may better prepare future teachers for various difficulties before they ever set foot in a classroom (Corcoran & O'Flaherty, 2022; Jennings & Greenberg, 2009; Murano et al., 2019; Schonert-Reichl et al., 2015). A few recent studies have found success with regard to SEL implementation for pre-service teachers and note that they have great potential to support the development of teaching-related SEL skills (Palomera et al., 2017; Schelhorn, 2023; Stipp, 2019). While it is also important to have SEL interventions and trainings for in-service teachers, a preventative approach that emphasizes embedding SEL into teacher education is more future oriented as it may eventually eliminate a need for such interventions. The present study further highlights the importance of having thorough SEL training for teachers as it demonstrates how important teachers' social-emotional skills are for themselves, their students, and their classrooms.

Limitations and Future Directions

While this research has provided valuable evidence for the importance of SEL for teachers, it is important to recognize the limitations of this study. First, the sample size for this research is relatively small and lacks diversity in terms of demographics. This limits the generalizability of the findings as the sample is not representative of the targeted population. It is also important to keep in mind that poor model fit was demonstrated for the SECTRS measurement as well as the path analysis that was conducted. In particular, the CFA conducted for the SECTRS scale yielded a low CFI value of .738 and a high RMSEA value of .097, both of which are not considered indicative of acceptable model fit (Brown, 2015; Hu & Bentler, 1999).). These values may indicate that the scale was not able to properly measure the construct

of teaches' SEC. Furthermore, a CFA was unable to be conducted for the MBI-ES measurement, potentially due to the small sample size, thus the fit for the burnout measurement was unable to be determined. While the CFA conducted for the path analysis demonstrated an acceptable CFI value of .922, it showed very high values of the absolute fit indices (RMSEA = .302; SRMR = .102). The high RMSEA value may be explained by the small degrees of freedom of the model (Kenny et al., 2015), however the SRMR value still exceeds the acceptable cut off of less than .10. This indicates that the model may not have been able to accurately detect the true relationships between the variables (West et al., 2012) and thus the presented results should be interpreted with caution. Furthermore, this study used self-report data for all of the variables. This creates the potential for biases including social desirability bias (Larson, 2018), as participants may be hesitant to disclose shortcomings in their social-emotional skills or negative feelings towards their students or careers. While it was emphasized in the consent form that participant data are anonymous to try to encourage truthful responses, it is difficult to ensure that participants represent themselves accurately. Additionally, self-report data is limited in that it only represents the perceptions of one group of people (in this case, teachers). This poses a limitation as previous research has shown that teachers and students have different perceptions of student-teacher relationships and student behaviour (Handa, 2020; Kavenagh et al., 2012; Murray et al., 2008), which are two of the main outcomes examined in this study.

Future research should aim to examine multiple perceptions of these variables to account for any discrepancies and bias related to self-report data. Another consideration that would be interesting in future research is to dig deeper into the relationship with specific social-emotional competencies and outcomes. For instance, it is possible that self-management is more related to teachers' emotions in comparison to responsible decision making. While it was outside of the

scope of the current project, it would be interesting and important to further understand which social-emotional competencies are most important for specific outcomes. Another avenue that would be important to explore is intervention or longitudinal studies which could better determine whether there is evidence for causal relationships (i.e., does the social-emotional competence of teachers cause differences in emotions and discipline, as well as subsequent outcomes?). While there is certainly a need for further research in this area, as it presently stands, the current research provides new and interesting evidence demonstrating how teachers' SEC is an important factor to consider in the classroom environment.

Conclusion

The present study investigated how classroom management factors mediated between teachers' social-emotional competence and three classroom outcomes. Results provided evidence that suggests that teachers' social emotional competence is important for encouraging positive student-teacher relationships and student behaviour, and for reducing burnout symptoms. Furthermore, this research extended the understanding of how teachers' social-emotional development can make an impact as it demonstrated that teachers' emotions and discipline styles may mediate the effects of social-emotional competence on student and teacher outcomes. These findings further emphasize the importance of promoting social-emotional learning for teachers.

References

Agyapong, B., Obuobi-Donkor, G., Burback, L., & Wei, Y. (2022). Stress, burnout, anxiety and depression among teachers: A scoping review. *International Journal of Environmental Research and Public Health, 19*(17). https://doi.org/10.3390/ijerph191710706

Al-Hamami, N. M., Hashim, M. T., Songip, A. R., & Al-Saeed, A. H. (2015). The effects of emotional intelligence on job satisfaction. *Information and Knowledge Management*, *5*(6), 98-102.

Allodi, M. W. (2010). The meaning of social climate of learning environments: Some reasons why we do not care enough about it. *Learning Environments Research 13*, 89-104. https://doi.org/10.1007/s10984-010-9072-9

Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom management self-efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review, 26*, 101-126. https://doi.org/10.1007/s10648-013-9244-0

Backer, J. A., Grant, S., & Morlock, L. (2008). The teacher-student relationship as a developmental context for children with internalizing or externalizing behavior problems. *School Psychology Quarterly, 23*(1), 3-15. https://doi.org/10.1037/1045-3830.23.1.3

Bassett, J. F., & Snyder, T. L. (2013). "Parenting" in the classroom: University students' evaluations of hypothetical instructors as a function of teaching styles and parenting styles. *North American Journal of Psychology, 14*(3), 477-462.

Becker, Gary S. (1993 [1964]), Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education, 3rd ed., University of Chicago Press.

Boekaerts, M., & Pekrun, R. (2015). Emotions and emotion regulation in academic settings.

In *Handbook of educational psychology* (pp. 90-104). Routledge.

Bolstad, E., Koleini, A., Skoe, F. F., Kehoe, C. E., Nygaard, E., & Havighurst, S. S. (2023).

Emotional competence training promotes teachers' emotion socialization and classroom

environment: Effects from a TIK-in-school pilot study. *Mental Health & Prevention, 30.*

https://doi.org/10.1016/j.mhp.2023.200273.

Brackett, M. A., & Katulak, N. A. (2006). Emotional intelligence in the classroom: Skill-based

training for teachers and students. In J. Ciarrochi & J. D. Mayer (Eds.), *Applying*

emotional intelligence: A practitioner's guide (pp. 1–27). Psychology Press

Brackett, M. A., Reyes, M. R., Rivers, S. E., Elbertson, N. A., Salovey, P. (2011). Assessing

teachers' beliefs about social and emotional learning. *Journal of Psychoeducational*

Assessment, 30(3), 219-236. https://doi.org/10.1177/0734282911424879

Briesch, A. M., Briesch, J. M., & Chafouleas, S. M. (2015). Investigating the usability of

classroom management strategies among elementary schoolteachers. *Journal of Positive*

Behavior Interventions, 17(1), 5-14. https://doi.org/10.1177/1098300714531827

Brophy, J. (1996). Teaching problem students. New York, NY: The Guilford Press.

Brophy, J. (2006). History of research on classroom management. In Evertson C. M., Weinstein

C. S. (Eds.), *Handbook of classroom management: Research, practice, and contemporary*

issues (pp. 17–43). Lawrence Erlbaum.

Brown, T. A. (2015). Confirmatory factor analysis for applied research. Guilford publications.

Carson, R. L. (2006). *Exploring the Episodic Nature of Teachers' Emotions as it Relates to Teacher Burnout*. Purdue University.

Carvalho, J. S., Marques Pinto, A., & Marôco, J. (2017). Results of a mindfulness-based social-emotional learning program on portuguese elementary students and teachers: A quasi-experimental study. Mindfulness, 8(2), 337–350. https://doi.org/10.1007/s12671-016-0603-z.

CASEL. (2020). *What Is the CASEL Framework?* https://casel.org/

Castillo, R., Fernández-Berrocal, P., & Brackett, M. A. (2013). Enhancing teacher effectiveness in Spain: A pilot study of the RULER approach to social and emotional learning. *Journal of Education and Training Studies, 1*(2), 263–272. https://doi.org/10.11114/jets.v1i2.203.

Castillo-Gualda, R., García, V., Pena, M., Galán, A., & Brackett, M. A. (2017). Resultados preliminares del método RULER en la inteligencia emocional y el compromiso laboral de profesores Españoles. *Electronic Journal of Research in Education Psychology, 15*(43), 641–664. https://doi.org/10.14204/ejrep.43.17068.

Chen, X., Dong, Q., & Zhou, H. (1997). Authoritative and authoritarian parenting practices and social and school performance in Chinese children. *International Journal of Behavioral Development, 21*(4), 855–74. https://doi.org/10.1080/016502597384703

Cheung, P. (2019). Teachers as role models for physical activity: Are preschool children more active when their teachers are active? *European Physical Education Review, 26*(1), 101-110. https://doi.org/10.1177/1356336X19835240

Ciarrochi, J., Chan, A. Y. C., & Bajgar, J. (2001). Measuring emotional intelligence in

    adolescents. *Personality and Individual Differences, 31*, 1105–1119.

    https://doi.org/10.1016/S0191-8869(00)00207-5

Collie, R. J., Shapka, J. D., Perry, N. E., Martin, A. J. (2015). Teachers' beliefs about social-

    emotional learning: Identifying teacher profiles and their relations with job stress and

    satisfaction. *Learning and Instruction, 29*, 148-157.

    https://doi.org/10.1016/j.learninstruc.2015.06.002

Corcoran, R. P., & O'Flaherty, J. O. (2022). Social and emotional learning in teacher

    preparation: Pre-service teacher well-being. *Teaching and Teacher Education, 111*.

    https://doi.org/10.1016/j.tate.2021.103563

Correa, J. S., Lopes, L. F., Almeida, D. M., & Camargo, M. E. (2019). Workplace wellbeing and

    burnout syndrome: Opposite faces in penitentiary work. *Revista de Administração*

    Mackenzie, 20(3)*.* https://doi.org/10.1590/1678-6971/eRAMG190149

De Jong, R., Mainhard, T., Van Tartwijk, J., Veldman, I., Verloop, N. & Wubbels, T. (2014).

    How pre-service teachers' personality traits, self-efficacy, and discipline strategies

    contribute to the teacher-student relationship. *British Journal of Educational Psychology,*

    84(2), 294 – 310. https://doi.org/10.1111/bjep.12025

De Jong, R., van Tartwijk, J., Wubbels, T., Veldman, I., & Verloop, N. (2013). Student teachers'

    discipline strategies: Relations with self-image, anticipated student responses and control

    orientation. *Educational Studies, 39*(5). https://doi.org/10.1080/03055698.2013.814562

Deci, E. L., & Ryan, R. M. (2000). The ''what'' and ''why'' of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry 11*(4), 227–68. https://doi.org/10.1207/S15327965PLI1104_01

Demanet, J., & Van Houtte, M. (2012). Teachers' attitudes and students' opposition. School misconduct as a reaction to teachers' diminished effort and affect. *Teaching and Teacher Education, 28*(6), 860-869. https://doi.org/10.1016/j.tate.2012.03.008

Demir, S. (2009). Teacher perceptions of classroom management and problematic behaviors in primary schools. *Procedia - Social and Behavioral Sciences, 1*(1), 584–589. https://doi.org/10.1016/J.Sbspro.2009.01.105

Derakhshan, A., Fathi, J., Pawlak, M., & Mariusz Kruk. (2022). Classroom social climate, growth language mindset, and student engagement: The mediating role of boredom in learning English as a foreign language. *Journal of Multilingual and Multicultural Development,* 1-19. https://doi.org/10.1080/01434632.2022.2099407

Djigic, G., & Stojiljkovic, S. (2011). Classroom management styles, classroom climate and school achievement. *Social and Behavioral Sciences, 29,* 819-828. https://doi.org/10.1016/j.sbspro.2011.11.310

Domitrovich, C. E., Bradshaw, C. P., Berg, J. K., Pas, E. T., Becker, K. D., Musci, R., Embry, D. D., & Ialongo, N. (2016). How do school-based prevention programs impact teachers? Findings from a randomized trial of an integrated classroom management and social-emotional program, *Prevention Science, 17*, 325-337. https://doi.org/10.1007/s11121-015-0618-z

Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock, Handbook of

    research on teaching (pp. 392-431). Macmillan.

Durkheim, Emile (1956), Education and Sociology, Glencoe (IL): Free Press.

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.

Ee, J., & Cheng, Q. L. (2013). Teachers' perceptions of students' social emotional learning and

    their infusion of SEL. *Journal of Teaching and Teacher Education, 1*(2), 59-72.

    https://doi.org/10.1016/j.learninstruc.2015.06.002

Elfenbein, H. A. (2014). The many faces of emotional contagion: An affective process theory of

    affective linkage. *Organizational Psychology Review*, *4*(4), 326–362.

    https://doi.org/10.1177/2041386614542889

Erdil, O., & Erotsun, O. G. (2011). The relationship between social climate and loneliness in the

    workplace and effects on employee well-being. *Procedia Social and Behavioral Sciences,*

    24, 505-525. https://doi.org/10.1016/j.sbspro.2011.09.091

Evertson C. M., Weinstein C. S. (Eds.). (2006). *Handbook of classroom management: Research,*

    practice, and contemporary issues. Lawrence Erlbaum.

Fitzgerald, M. M., Shipman, K., Pauletic, M., Ellesworth, K., & Dymnicki, A. (2022). Promoting

    educator social emotional competence, well-being, and student-educator relationships: A

    pilot study. *Mental Health & Prevention, 26*. https://doi.org/10.1016/j.mhp.2022.200234

Fitzgerald, M. M., Shipman, K., Pauletic, M., Ellesworth, K., & Dymnicki, A. (2022). Promoting

    educator social emotional competence, well-being, and student-educator relationships: A

    pilot study. *Mental health & Prevention, 26*. https://doi.org/10.1016/j.mhp.2022.200234

Flook, L., Goldberg, S. B., Pinger, L., Bonus, K., & Davidson, R. J. (2013). Mindfulness for

    teachers: A pilot study to assess effects on stress, burnout, and teaching efficacy. *Mind,*

    Brain, and Education, 7(3), 182–195. https://doi.org/10.1111/mbe.12026.

Frenzel, A. C., Daniels, L., & Buric, I. (2021). Teacher emotions in the classroom and the

    implications for students. *Educational Psychologist, 56*(4), 250-264.

    https://doi.org/10.1080/00461520.2021.1985501

Frenzel, A. C., Goetz, T., & Stockinger, K. (2023). Emotions and emotion regulation. In Schutz,

    P. A., Muis, K. R. (Eds.), *Handbook of Educational Psychology* (pp. 219-244).

    Routledge. https://doi-org.proxy3.library.mcgill.ca/10.4324/9780429433726

Froyen L. A., & Iverson A. M. (1999). *Schoolwide and classroom management: The reflective*

    educator-leader. Prentice Hall.

Garner, P. W., Parker, T. S., & Prigmore, S. B. (2019). Caregivers' emotional competence and

    behavioral responsiveness as correlates of early childcare workers' relationships with

    children in their care. Infant Mental Health Journal, 40(4), 496-512.

    https://doi.org/10.1002/imhj.21784

Goetz, T., Bieleke, M., Gogol, K., van Tartwijk, J., Mainhard, T., Lipnevich, A. A., & Pekrun, R.

    (2021). Getting along and feeling good: Reciprocal associations between student-teacher

    relationship quality and students' emotions. *Learning and Instruction, 71*.

    https://doi.org/10.1016/j.learninstruc.2020.101349

Greenberg, M. T., & Abenavoli, R. (2017). Universal interventions: Fully exploring their impacts and potential to produce population-level impacts. *Journal of Research on Educational Effectiveness, 10*(1), 40-67. https://doi.org/10.1080/19345747.2016.1246632

Greenberg, M. T., Domitrovich, C. E., Weissberg, R. P., & Durlak, J. A. (2017). Social and emotional learning as a public health approach to education. *The Future of Children*, 13-32. https://www.jstor.org/stable/44219019

Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology, 43*(6), 495 -513. https://doi.org/10.1111/bjep.12089

Han, S. S., & Weiss, B. (2005). Sustainability of teacher implementation of school-based mental health programs. *Journal of Abnormal Child Psychology, 33,* 665-679.

Handa, C. M. (2020). Examining students' and teachers' perceptions of differentiated practices, student engagement, and teacher qualities. *Journal of Advanced Academics, 31*(4), 530-56.

Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. Teaching and Teacher Education, 16, 811–826.

Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education, 16*, 811–826. https://doi.org/10.1016/S0742-051X(00)00028-7

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. https://doi.org/10.1080/10705519909540118

Iancu, A. E., Rusu, A., Măroiu, C., Păcurar, R., & Maricuţoiu, L. P. (2018). The effectiveness of interventions aimed at reducing teacher burnout: A meta-analysis. *Educational Psychology Review, 30*(2), 373–396. https://doi.org/10.1007/s10648-017-9420-8.

IBM Corp. (2020). IBM SPSS Statistics for Windows (Version 27.0) [Computer software]. IBM Corp.

Jeloudar, S. Y., Yunus, A. S. M., Roslan, S, & Md S. (2011). Teachers' emotional intelligence and its relation with classroom discipline strategies based on teachers and students' perceptions. *Journal of Psychology, 2*(2), 95-102. https://doi.org/10.1080/09764224.2011.11885468

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/10.3102/00346543083256

Jennings, P. A., Doyle, S., Oh, Y., Rasheed, D., Frank, J. L., & Brown, J. L. (2019). Long-term impacts of the CARE program on teachers' self-reported social and emotional competence and well-being. *Journal of School Psychology, 76,* 186-202. https://doi.org/10.1016/j.jsp.2019.07.009

Jones, T. S. (2004). Conflict resolution education: The field, the findings, and the future. *Conflict Resolution Quarterly*, 22, 233.

Jussim, L., & Harber, K. D. (2005). Teacher expectations and self-fulfilling prophecies: Knowns and unknowns, resolved and unresolved controversies. *Personality & Social Psychology Review, 9*, 131–155.

Kanbur, O., & Kirikkaleli, N. O. (2023). Interaction between teachers' emotional intelligence and classroom management. *Perspectives in Education*, *41*(2), 3-15.

Karabay, S. O. (2017). Emotion regulation, teaching beliefs and child-teacher relationships from the perspectives of pre-school teachers. *International Journal of Primary, Elementary and Early Years Education, 3*(12), 101-115. https://doi.org/10.1080/03004279.2017.1405057

Kavenagh, M., Freeman, E., & Ainley, M. (2012). Differences between adolescent boys' and teachers' perceptions of the student-teacher relationship. *The Australian Educational and Developmental Psychologist, 29*(1), 1-16. https://doi.org/10.1017/edp.2012.3

Keller, M. M., Chang, M., Becker, E. S., Goetz, T., Frenzel, A. C. (2014). Teachers' emotional experiences and exhaustion as predictors of emotional labor in the classroom: An experience sampling study. *Frontiers in Psychology, 5*. https://doi.org/10.3389/fpsyg.2014.01442

Kenny, D. A., Kaniskan, B., & McCoach, D. B. (2015). The performance of RMSEA in models with small degrees of freedom. *Sociological Methods & Research, 44*(3), 486-507. https://doi.org/10.1177/0049124114543236

Khodarahmi, E., & Nia, Z. M. (2014). EFL teachers' classroom discipline strategies and learners' willingness to communicate in English inside the classroom. *Procedia – Social and Behavioral Sciences, 98.* https://doi.org/10.1016/j.sbspro.2014.03.507

Kline, R. B. (2016). *Principles and practice of structural equation modeling* (4th ed.). Guilford Publications.

Knight, G. P., Virdin, L. M., Ocampo, K. A., & Roosa, M. (1994). An examination of the cross ethnic equivalence of measures of negative life events and mental health among Hispanic and Anglo-American children. *American Journal of Community Psychology, 22*(6), 767-783. https://doi.org/10.1007/BF02521558

Konishi, C., Wong, T. K. Y., Persram, R. J., Vargas-Madriz, L. F., & Liu, X. (2022). Reconstructing the concept of school climate. *Educational Research, 42*(2), 159-175. https://doi.org/10.1080/00131881.2022.2056495

Korpershoek, H., Harms, T., de Boer, G., van Kuijk, M., & Doolaard, S. (2016). A meta-analysis of the effects of classroom management strategies and classroom management programs on students' academic, behavioral, emotional, and motivational outcomes. *Review of Educational Research, 86*(3), 643-680. https://doi.org/10.3102/003465431562679

Kunter, M., Frenzel, A. C., Nagy, G., Baumert, J., and Pekrun, R. (2011). Teacher enthusiasm: Dimensionality and context specificity. *Contemporary Educuational Psychology, 36*, 289–301. https://doi.org/10.1016/j.cedpsych.2011.07.001

Lane, K. L., Menzies H. M., Bruhn A. L., Crnobori M. (2011). *Managing challenging behaviors in schools: Research-based strategies that work*. Guilford Press.

Larson, R. B. (2018). Controlling social desirability bias. *International Journal of Market Research, 61*(5). https://doi.org/10.1177/1470785318805305

Lee, A. Y., Wang, Y., & Yang, F. (2021). Feeling exhausted? Let's play – how play in work

    relates to experienced burnout and innovation behaviour. *Applied Research in Quality of*

    Life, 16, 629-648. https://doi.org/10.1007/s11482-019-09794-1

Legette, K. B., Rogers, L. O., & Warren, C. A. (2020). Humanizing student-teacher relationships

    for black children: Implications for teachers' social-emotional training. *Urban Education,*

    57(2). https://doi.org/10.1177/0042085920933319

Leung, D., & Lee, W. (2006). Predicting intention to quit among Chinese teachers: Different

    predictability of burnout components. *Anxiety, Stress, and Coping: An International*

    Journal, 19, 129 –141. http://doi.org/10.1080/10615800600565476

Lewis, R. 2001. Classroom discipline and student responsibility: The students' view. *Teaching*

    and Teacher Education 17(3), 307–19. https://doi.org/10.1016/S0742-051X(00)00059-7

Lewis, R., Romi, S., Qui, X., & Katz, Y. J. (2005). Teachers' classroom discipline in Australia,

    China, and Israel. *Teaching and Teacher Education, 21*, 729-741.

    https://doi.org/10.1016/j.tate.2005.05.008

Longobardi, C., Settanni, M., Lin, S., & Fabris, M. A. (2021). Student-teacher relationship

    quality and prosocial behaviour: The mediating role of academic achievement and a

    positive attitude towards school. *91*, 547-562. https://doi.org/10.1111/bjep.12378

Lopes, J., Silva, E., Oliveira, C., Sass, S., & Martin, N. (2017). Teacher's classroom

    management behavior and students' classroom misbheavior: A study with 5th through 9th

    – grade students. *Electronic Journal of Research in Educational Psychology, 15*(3), 467-

    490. http://dx.doi.org/10.14204/ejrep.43.17075

Madigan, D. J., & Kim, L. E. (2021). Does teacher burnout affect students? A systematic review of association with academic achievement and student-reported outcomes. *International Journal of Educational Research, 105.* https://doi.org/10.1016/j.ijer.2020.101714

Mahoney, J. L., Durlak, J. A., & Weissberg, R. P. (2018). An update on social and emotional learning outcome research. *Phi Delta Kappan, 100*(4), 18-23. https://doi.org/10.1177/0031721718815668

Maior, E., Dobrean, A., & Pasarelu, C. R. (2020). Teacher rationality, social-emotional competencies and basic needs satisfaction: Direct and indirect effects on teacher burnout. *Journal of Evidence-Based Psychotherapies, 20*(1), 135-152.

Marchant, G. J., Paulson, S. E. & Rothlisberg, B. A. (2001). Relations of middle school students' perceptions of family and school contexts with academic achievement. *Psychology in the Schools, 38*(6), 505–19. https://doi.org/10.1002/pits.1039

Marsh, H., W., Hau, K. T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cut off values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural equation modeling, 11*(3), 320-341.

Maslach, C. Jackson, S. E., Schwab, R. L. (1996). Maslach burnout inventory: Third edition. In Zalaquet, C. P. & Woods, R. J. (Eds.), *Evaluating stress: A book of resources* (pp. 191 – 218). Scarecrow Education.

Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. World Psychiatry, 15(2), 103–111. https://doi.org/10.1002/wps.20311.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Review of

   Psychology, 52(1), 397– 422. https://doi.org/10.1146/annurev.psych.52.1.397.

Maslovaty, N. (2000). Teachers' choice of teaching strategies for dealing with socio-moral

   dilemmas in the elementary school. *Journal of Moral Education, 29*(4), 429-444.

   https://doi.org/10.1080/713679394

Mayer, J. D., Salovey, P., Caruso, D. R., & Sitarenios, G. (2001). Emotional intelligence as a

   standard intelligence. *Emotion, 3*, 232–242. https://doi.org/0.1037//1528-3542.1.3.232

McHugh R. M., Horner C. G., Colditz J. B., Wallace T. L. (2013). Bridges and barriers:

   Adolescent perceptions of student–teacher relationships. *Urban Education*, 48(1), 9–43.

Merrell, K. W., Juskelis, M. P., Tran, O. K., & Buchanan, R. (2008). Social and emotional

   learning in the classroom: Evaluation of strong kids and strong teens on students' social-

   emotional knowledge and symptoms. *Journal of Applied Psychology, 24*(2), 209-224.

   https://doi.org/10.1080/15377900802089981

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

Mousavi, S. H., Yarmohammadi, S., Nosrat, A. B., & Tarasi, Z. (2012). The relationship

   between emotional intelligence and job satisfaction of physical education

   teachers. *Annals of Biological Research*, 3(2), 780-788.

Murano, D., Way, J. D., Martin, J. E., Walton, K. E., Anguiano-Carrasco, C., & Burrus, J.

   (2019). The need for high quality pre-service and inservice teacher training in social and

emotional learning. *Journal of Research in Innovative Teaching & Learning, 12*(2), 111-113. https://doi.org/10.1108/JRIT-02-2019-0028

Murray, C., Murray, K. M., & Waas, G. A. (2008). Child and teacher reports of teacher-student relationships: Concordance of perspectives and associations with school adjustment in urban kindergarten classrooms. Journal of Applied Developmental Psychology, 29, 46–61.

Näring, G., Vlerick, P. & Van de Ven, B. (2012). Emotion work and emotional exhaustion in teachers: the job and individual perspective, *Educational Studies, 38*(1), 63-72. https://doi.org/10.1080/03055698.2011.567026

Nizielski, S., Hallum, S., Lopes, P. N., & Shutz, A. (2012). Attention to student needs mediates the relationship between teacher emotional intelligence and student misconduct in the classroom. *Journal of Psychoeducational Assessment, 30*(4), 320-329. https://doi.org/10.1177/0734282912449439

Oliveira, S., Roberto, M.S., Veiga-Simão, A.M. *et al.* (2021). A meta-analysis of the impact of social and emotional learning interventions on teachers' burnout symptoms. *Educational Psychology Review 33*, 1779–1808. https://doi.org/10.1007/s10648-021-09612-x

Oliver, R. M., Wehby, J. H., & Reschly, D. J. (2011). Teacher classroom management practices: Effects on disruptive or aggressive student behavior. *Campbell Systematic Reviews, 7*(1), 1-55. https://doi.org/10.4073/csr.2011.4

Ozdemir, Y. (2007). The role of classroom management efficacy predicting teacher burnout. *International Journal of Educational and Pedagogical Sciences, 1*(11), 751 - 757.

Palomera, R., Briones, E., Gómez-Linares, A., & Vera, J. (2017). Filling the gap: Improving the
      social and emotional skills of pre-service teachers. *Revista de Psicodidáctica (English
      ed.), 22*(2), 142-149. https://doi.org/10.1016/j.psicoe.2017.05.005

Pane, D. M. (2010). Viewing classroom discipline as negotiable social interaction: A
      communities of practice perspective. *Teaching and Teacher Education, 26*, 87-97.
      https://doi.org/10.1016/j.tate.2009.05.002

Parkinson, B. (2011). Interpersonal emotion transfer: Contagion and social appraisal. *Social and
      Personality Psychology Compass*, *5*(7), 428–439.

Parkinson, B., Fischer, A. H., Manstead, A. S. R. (2001). Emotion in social relations: cultural,
      group, and interpersonal processes. Psychology Press.

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., &
      Pachan, M. (2008). The positive impact of social and emotional learning for kindergarten
      to eighth-grade students: Findings from three scientific reviews. Technical Report.
      Collaborative for Academic, Social, and Emotional Learning (NJ1).

Plster, B., & Hutchison, A. (2016). Fun times: The relationship between fun and workplace
      engagement. *Employee Relations, 38*(3), 332-350. https://doi.org/10.1108/ER-03-2014-
      0027

Postholm, M. B. (2013). Classroom Management: What does research tell us? *European
      Educational Research Journal, 12*, 389-402. https://doi.org/10.2304/eerj.2013.12.3.389

Poulou, M. S. (2017). The relation of teachers' emotional intelligence and students' social skills
      to students' emotional and behavioral difficulties: A study of preschool teachers'

perceptions. *Early Education and Development, 28*(8), 996-1010.

https://doi.org/10.1080/10409289.2017.1320890

Poulou, M. S., & Denham, S. A. (2022). Teachers' emotional expressiveness and coping

reactions to students: Associations with students' social-emotional competences and

school adjustment. *Early Education and Development,* 1-19.

https://doi.org/10/1080/10409289.2022.2053486

Rahimi, M., & Hosseini, F. K. (2011). EFL teachers' classroom discipline strategies: The

students' perspective. *Social and Behavioral Sciences, 31.*

https://doi.org/10.1016/j.sbspro.2011.12.060

Roache, J. E., & Lewis, R. (2011). The carrot, the stick, or the relationship: What are the

effective disciplinary strategies? *European Journal of Teacher Education, 34*(2), 233-

248, https://doi.org/10.1080/02619768.2010.542586

Rucinski C. L., Brown J. L., Downer J. T. (2018). Teacher–child relationships, classroom

climate, and children's social-emotional and academic development. *Journal of*

Educational Psychology, 110, 992–1004. https://doi.org/10.1037/edu0000240

Rydell, A. & Henricsson, L. (2004). Elementary school teachers' strategies to handle

externalizing classroom behavior: A study of relations between perceived control, teacher

orientation and strategy preferences. *Scandinavian Journal of Psychology, 42*(2), 93 –

102. https://doi.org/10.1111/j.1467-9450.2004.00384.x

Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between

emotional intelligence and subjective well-being: A meta-analytic investigation. *The*

Journal of Positive Psychology, 11, 276–285.

https://doi.org/10.1080/17439760.2015.1058968

Sandilos, L. E., Neugebauer, S. R., DiPerna, J. C., Hart, S. C., & Puiwa, L. (2023). Social–emotional learning for whom? Implications of a universal SEL program and teacher well-being for teachers' interactions with students. *School Mental Health 15*, 190–201. https://doi.org/10.1007/s12310-022-09543-0

Schafer, J. L. (1999). Multiple imputation: A primer. *Statistical Methods in Medical Research, 8*, 3-15.

Schelhorn, I., Lindl, A., & Kuhbandner, C. (2023). Evaluating a training of emotional competence for pre-service teachers. *Teaching and Teacher Education, 123.* https://doi.org/10.1016/j.tate.2022.103947

Schonert-Reichl, K. A., Hanson-Peterson, J. L., & Hymel, S. (2015). SEL and preservice teacher education. In J. A. Durlak, C. E. Domitrovich, R. P. Weissberg, & T. P. Gullota (Eds.), *Handbook of Social and Emotional Learning: Research and Practice,* (pp. 406-421). Guilford Press.

Schultz, Theodore W. (1963), The Economic Value of Education, University Press.

Seidler, A., Thinschmidt, M., Deckert, S., Then, F., Hegewald, J., Nieuwenhuijsen, K., & Riedel-Heller, S. G. (2014). The role of psychosocial working conditions on burnout and its core component emotional exhaustion – a systematic review. *Journal of Occupational Medicine and Toxicology, 9*(10). https://doi.org/10.1186/1745-6673-9-10

Skinner, E., S. Johnson, and T. Snyder. (2005). Six dimensions of parenting: A motivational

model. Parenting. *Science and Practice, 5*(2), 175–235.

https://doi.org/10.1207/s15327922par0502_3

Split, J. L., Koomen, H. M. Y., & Thijs, J. T. (2011). Teacher wellbeing: The importance of

teacher-student relationships. *Educational Psychology Review, 23*. 457-477.

https://doi.org/10.1007/s10648-011-9170-y

Stipp, B. (2019). A big part of education also: A mixed-methods evaluation of a social and

emotional learning (SEL) course for pre-service teachers. *Emotional and Behavioural*

Difficulties, 24(2), 204-218. https://doi.org/10.1080/13632752.2019.1597569

Sun, R. C. F., & Shek, D. T. L. (2012). Student classroom misbehavior: An exploratory study

based on teachers' perceptions. *The Scientific World Journal, 2012*, 1–8.

https://doi.org/10.1100/2012/208907

Sutton, R. E. (2004). Emotion regulation goals and strategies of teachers. *Social Psychology of*

Education, 7, 379–398. https://doi.org/10.1007/s11218-004-4229-y

Sutton, R. E., & Harper, E. (2009). Teachers' emotion regulation in L.J. Saha, A.G. Dworkin

(eds.), *International Handbook of Research on Teachers and Teaching*, 389–401.

Sutton, R. E., & Knight, C. (2006a). Teachers' emotion regulation. In A. V. Mitel (Ed.), Trends

in educational psychology (pp. 107–135). Nova Science.

Sutton, R. E., & Knight, C. (2006b, April) Assessing teachers' emotion regulation. Paper

presented at the American Educational Research Association Meeting, San Francisco,

CA.

Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the

literature and directions for future research. *Emotional Psychology Review, 15*(4), 327-

358. https://doi.org/10.1023/A:1026131715856

Tabachnick, B. G., & Fidell, L. S. (2019). *Using multivariate statistics* (7th ed.). Pearson.

Turlani, A. S., & Durmuscelebi, M. (2006). Factors influencing teachers disciplinary strategies.

Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 14(21), 1-12. Retrieved from

https://avesis.erciyes.edu.tr/yayin/c37069b2-8689-4881-87b0-5b811cd4ab6f/factors-

influencing-teachers-disciplinary-strategies

Turlani, A. S., & Durmuscelebi, M. (2006). Factors influencing teachers' disciplinary strategies.

Erciyes Universitesi Sosyal Bilimler Enstitusu Dergisi, 14(21), 1 - 12. Retrieved from

https://avesis.erciyes.edu.tr/yayin/c37069b2-8689-4881-87b0-5b811cd4ab6f/factors-

influencing-teachers-disciplinary-strategies

Uibu, K., & Kikas, E. (2014) Authoritative and authoritarian-inconsistent teachers' preferences

for teaching methods and instructional goals. *Education 3-13, 42*(1), 5-22.

https://doi.org/10.1080/03004279.2011.618808

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.

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

Virtanen, T. E., Vaaland, G. S., & Ertesvag, S., K., (2019). Associations between observed

    patterns of classroom interactions and teacher wellbeing in lower secondary school.

    Teaching and Teacher Education, 77, 240-252. https://doi.org/10.1016/j.tate.2018.10.013

Walker, J. M. T. (2008). Looking at teacher practices through the lens of parenting style. *The*

    Journal of Experimental Education, 76(2), 218–40.

    https://doi.org/10.3200/JEXE.76.2.218-240

Walker, J. M. T. (2009). Authoritative classroom management: How control and nurturance

    work together. *Theory into Practice, 48*(2), 122-129.

    https://doi.org/10.1080/00405840902776392

Wang, J., Yang, Y., Li, H., & van Aalst, J. (2021). Continuing to teach in a time of crisis: The

    Chinese rural educational system's response and student satisfaction and social and

    cognitive presence. *British Journal of Educational Technology, 52*, 1494–

    1512. https://doi.org/10.1111/bjet.13129

Wang, M. T., Degol, J. L., Amemiya, J., Parr, A., & Guo, J. (2020). Classroom climate and

    children's academic and psychological wellbeing: A systematic review and meta-

    analysis. *Developmental Review, 57*. https://doi.org/10.1016/j.dr.2020.100912

Wentzel, K. R. (1997). Student motivation in middle school: The role of perceived pedagogical

    caring. *Journal of Educational Psychology 89*, 411–19. https://doi.org/10.1037/0022-

    0663.89.3.411

Wentzel, K. R. (2002). Are effective teachers like good parents? Teaching styles and student

    adjustment in early adolescence. *Child Development, 73*(1), 287–301.

    https://doi.org/10.1111/1467-8624.00406

West, S. G., Taylor, A. B., & Wu, W. (2012). Model fit and model selection in structural

      equation modeling. In R. H. Hoyle (Ed.), *Handbook of Structural Equation Modeling* (pp.

      209-231). Guilford Press.

Wigelsworth, M., Lendrum, A., Oldfield, J., Scott, A., Bokkel, I., Tate, K., & Emery, C. (2020).

      The impact of trial stage, developer involvement and international transferability on

      universal social and emotional learning programme outcomes: A meta-analysis.

      Cambridge Journal of Education, 46, 347-376.

      https://doi.org/10.1080/0305764X.2016.1195791

Wills, H. P., Caldarella, P., Mason, B. A., Lappin, A., & Anderson, D. H. (2019). Improving

      student behavior in middle schools: Results of a classroom management

      intervention. *Journal of Positive Behavior Interventions*, *21*(4), 213-

      227. https://doi.org/10.1177/1098300719857185

Appendix

Certificate of Ethics Approval

McGill University
Research Ethics Board Office
www.mcgill.ca/research/research/compliance/human

CERTIFICATE OF ETHICS APPROVAL

REB File Number:	23-03-056
Project Title:	How the Social and Emotional Competencies of Canadian Elementary School Teachers Predict Classroom Management
Student Principal Investigator:	Brooke MacLeod
Department:	Educational & Counselling Psychology
Supervisor Name:	Professor Chiaki Konishi
Sponsor/Funding Agency (if applicable):	Social Sciences and Humanities Research Counsel
Research Team (if applicable):	

Name	**Affiliation**

Approval Period:

FROM	**TO**
02-May-2023	01-May-2024

The *REB-2* reviewed and approved this project by Delegated review in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Participants and the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans.

* Approval is granted only for the research and purposes described.
* The PI must inform the REB if there is a termination or interruption of their affiliation with the University. The McGill REB approval is no longer valid once the PI is no longer a student or employee.
* An **Amendment** form must be used to submit any proposed modifications to the approved research. Modifications to the approved research must be reviewed and approved by the REB before they can be implemented. Changes to funding or adding new funding to a previously unfunded study must be submitted as an Amendment.
* A **Continuing Review** form must be submitted before the above expiry date. Research cannot be conducted without a current ethics approval. Submit 2-3 weeks ahead of the expiry date.
A total of 5 renewals are permitted after which time a new application will need to be submitted.
* A **Termination** form must be submitted to inform the REB when a project has been completed or terminated.
* A **Reportable New Information** form must be submitted to report any unanticipated issues that may increase the risk level to participants or that may have other ethical implications or to report any protocol deviations that did not receive prior REB approval.
* The REB must be promptly notified of any new information that may affect the welfare or consent of participants.
* The REB must be notified of any suspension or cancellation imposed by a funding agency or regulatory body that is related to this study.
* The REB must be notified of any findings that may have ethical implications or may affect the decision of the REB.