

# **The Role of Social-Emotional Competence in Managing Multimodal Classroom Instruction: A Gender-Based Comparative Study in ELT Teacher Training**

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## **Abstract**

The growing trend of using multiple modes to teach English to non-native/second language speakers has led to teachers having to meet a greater number of social and emotional needs in the classroom. This study utilized both quantitative and qualitative methods to determine if social and emotional competence can support teacher-trainees in their use of multiple modes and if there are differences observed based on gender. Fifty ELT Teacher Training graduates (25 male and 25 female) completed an SEC-infused (social-emotional competence) four-week multimodal teacher-training course using the principles of Social-Emotional Learning (SEL). Pre- and post-intervention SEC measures were completed by all participants, and each participant was required to present a micro real-world teaching lesson using multiple methods of instruction, using evaluations from performance rubrics and peer reviews. The quantitative results using paired-samples t-tests found statistically significant improvements in the overall SEC scores and the individual SEC sub-dimensions for both groups, with large effect sizes. The results of one-way ANOVA tests indicated that the women's group had significantly higher post-test scores for empathy and interpersonal communication, while the men's group showed significantly better regulation of emotions and control of the classroom. The qualitative findings based on thematic analysis of participants' reflective journals indicated that SEC was a major resource in supporting teacher-trainees in managing technological disruptions, managing learner engagement, and improving confidence in their own teaching. These findings currently support the argument that social-emotional competency should be integrated into teacher training within the Multiple Mode Approach to Teaching English Language Learners and that gender-responsive teacher-training models should be adopted.

**Keywords:** Social-Emotional Competence; Multimodal Instruction; ELT Teacher Education; Teacher Training

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## **Introduction**

The incorporation of multimodal instruction (integrating text, visuals, sound, and movement) is becoming increasingly common in today's educational context and has dramatically changed the way pedagogical practices take place, especially for English Language Teaching (ELT). It is no longer adequate for the teacher to merely provide a linear text-based interaction when teaching a language; instead, there is a need for the teacher to facilitate interaction across multiple modes and maintain both coherence of instruction and engagement of learners across all modes. Although multimodal instruction provides increased opportunity for learners to make meaning and have access to content, it also increases the cognitive, emotional, and relational demands placed on teachers.

In lieu of this shift in pedagogy, effective multimodal instruction necessitates something beyond just technical skills and knowledge of digital tools; teachers need social-emotional competence (SEC) as a core dimension of their professional competencies, rather than simply being considered desirable personal attributes. The ability to regulate one's own emotions, maintain positive social relationships, and adapt to the needs of learners in a setting characterized by considerable stimulation and distractions is essential to the successful implementation of multimodal instruction. Teachers with well-developed SEC will have greater success in navigating the complexities associated with the implementation of multimodal approaches, creating an emotionally supportive learning environment, and sustaining instructional fidelity when faced with the pressures of multimodal instruction.

A large amount of research has emerged indicating that SEC plays an important role in teacher effectiveness, learner engagement, and professional well-being (Durlak et al., 2020; Lozano-Peña et al., 2021). The relationship between social-emotional competencies and classroom management, lower levels of teacher burnout, and improved responsiveness to instructional needs has been demonstrated in teacher education (Pham, 2024; Schonert-Reichl et al., 2024); however, most studies on social-emotional competencies have focused on the general or more traditional classroom contexts, with little attention paid to how social-emotional competencies function within digitally-mediated multimodal instructional environments. Creative digital and blended pedagogical models continue to become more common in English language teaching environments, and the amount of emotional labor required in teaching is increasing; thus, social-emotional competencies are even more relevant to this new methodology.

Recent research in multimodal learning has identified that supporting multiple representation modes through multimodal instruction increases teachers' cognitive and emotional demands (Manowaluilou et al., 2024; Mayer, 2020). Teachers must manage not only how content is delivered, but also how the learner is comprehending the content, and how effectively they will use technology during class while still being in a classroom environment with interaction and socialization. If multimodal instruction does not take into account teachers' emotional regulation ability and interpersonal awareness, then it may become fragmented and confusing, thus ineffective from a pedagogical perspective. However, having a strong sense of SEC could serve as an intermediary resource for helping teachers to coordinate the different parts of their multimodal instruction while also maintaining a climate of supportiveness and inclusiveness within the classroom.

Although both multimodal pedagogy and social-emotional learning are becoming more widely recognized in formal education, there is very little empirical research regarding how social-emotional competencies support teachers' ability to deliver multimodal instruction through the use of technology in English language teaching. Previous studies have largely separated the constructs of SEC and multimodality; therefore, little is known about how SEC influences the instructional practices of pre-service teachers who must also deal with many different modes of communication simultaneously. This is particularly true in pre-service teacher preparation programs, which include ample preparation in both methodology and technology but provide relatively little direct instruction in the emotional and relational aspects of multimodal instruction.

Another gap in the literature is the effect of gender on the development and use of SEC. Emerging evidence suggests that socialization may impact how males and females develop and use Social Emotional Competencies (SEC) and may impact their instruction and classroom management (Küçükakın, 2024). In many studies, female teachers demonstrate greater levels of empathic engagement than their male counterparts, whereas male teachers are more adept at emotional regulation and assertive management of their classrooms (Slovak & Fitzpatrick, 2015). Yet, when one considers the role of gender in their study of SEC in multimodal English Language Teacher (ELT) training, few studies have taken a gender-responsive lens or employed a gender-sensitive approach to study SEC within multimodal ELT

training contexts; thus, caution is needed when considering previous studies because the findings may be misinterpreted and used as a means of stereotyping.

This gap for continued research is critical for the advancement of ELT teacher education programs. A lack of a complex understanding involving Social Emotional Competency (SEC) and multimodal instructional demands and how their intersection may differ by gender on behalf of teacher training programs runs the risk of favoring technical competency while ignoring the foundational emotional aspects of teaching effectively. This indicates an urgent need for empirical research that incorporates SEC development in addition to multimodal instruction training and investigates its effects on instructional performance from a theoretically-based, gender-sensitive perspective.

The current study addresses an urgent need to explore the role of SEC in the management of multimodal instructional settings among pre-service English Language Teaching (ELT) teacher trainees by infusing embodied SEC development into multimodal training modules as well as utilizing a mixed-methods based research comparative design founded on gender effects to add empirical and pedagogical contributions to ongoing discussions surrounding teacher professionalism, SEC, and technology-enhanced language teacher education.

### **Statement of the Problem**

Due to the rapid growth of multimodal instruction within English Language Teaching (ELT), all teachers now find themselves managing not just text, but also visual, audio, and digital semiotic resources simultaneously when teaching their students; therefore, they need to develop new management skills to effectively manage these different forms of semiosis at the same time. Even though the promotion of using multiple semiotic resources as a way to enhance learner engagement and provide increased access to learning has occurred widely, the successful use of multimodal resources in teaching learners requires much more than merely having methodological knowledge or technological capacity. Within a multimodal classroom environment, both the emotional, cognitive, and relational demands on teachers become even more intense, especially concerning managing their classrooms, engaging and motivating all learners, and effectively responding to disruptions from digital media and technology use (Manowalulou et al., 2024; Mayer, 2020). As such, these increased demands highlight the critical importance of social-emotional competence (SEC) to effectively use multimodal resources in teaching and learning.

Although there has been an increasing amount of research on the relationship between SEC and both teacher effectiveness and classroom climate, as well as teacher professional well-being, the exploration of the SEC of teachers in using multimodal resources to teach ELT learners has been greatly limited (Durlak et al., 2020; Lozano-Peña et al., 2021). In the majority of existing studies, SEC has been examined in the context of traditional (face-to-face) instructional delivery methods; specifically, SEC has typically been examined as a generalized personal trait possessed by individual teachers rather than as a form of professional competence activated by specific pedagogical pressures (Pham, 2024). As a result, little empirical evidence exists regarding how teachers' capacity to coordinate multiple types of instruction through multiple modes is supported by social-emotional competencies.

This gap is specifically apparent in ELT teacher education programs in which teacher education preparation focuses primarily on pedagogical content knowledge (i.e. content areas of expertise), methodology of teaching (i.e., how to teach this content area), and Digital Literacy (i.e. how to use technology); however, the amount of systematic preparation of teachers for the emotional and relational challenges of multimodal (or Technology-Enhanced) Teaching is extremely minimal (Schonert-reichl et al., 2024). There is substantial research indicating that many pre-service teachers enter their practicum placements with a high level of comfort using technology (i.e. technical proficiency); however, they lack

the support required for developing Emotion Regulation, Empathic Communication, and Interpersonal Flexibility, which are necessary to effectively manage the instructional complexity and maintain classroom structure (Keshishi & Hack, 2023; Lozano-Peña et al., 2021). A lack of integration of the SEC into the preparation process of teachers may prevent the full realization of the pedagogy of multimodal instruction and may cause increased anxiety for teachers and fragmentation of instruction.

There is also currently little research on the contribution made by Gender to the Social-Emotional Competence (SEC) of an individual when developing/enacting this competence within Multimodal ELT. The available research shows that there are likely to be gendered patterns in socialization that affect the way a teacher demonstrates empathy, regulates their emotions, and exerts authority in a classroom environment; but there is little empirical evidence of this in Multimodal Teacher Education (Küçükakın, 2024; Slovak & Fitzpatrick, 2015). The Teacher Education (TE) programs are currently unable to develop a foundation of knowledge to develop/design SEC interventions that respond to the diversity within emotional development in a way that does not also reinforce essentialist ideas.

Together, the lack of empirical studies that have integrated the elements of social emotional competence (SEC), multimodal instructional practices, and gender as variables in English Language Teaching (ELT) teacher preparation creates an important void within the current literature. This void hinders the development of theory and practice in this field, thereby impeding the ability of teacher preparation programs to prepare future ELT teachers for the emotional and pedagogical challenges present in today's classroom environments. A more thorough exploration of this issue is needed to identify the means by which SEC can be promoted through multimodal training and how the development of SEC will produce different instructional outcomes when implemented by ELT teachers based on gender. This knowledge will provide the foundation for more comprehensive, emotionally grounded models of ELT teacher preparation.

### **Significance of the Study**

The significance of this research extends to the theoretical, pedagogical, and programmatic levels of English Language Teaching Teacher Education (ELTTE) with an emphasis on the need to understand the competencies that support teachers in managing the instructional complexity associated with multimodal instruction, as it will be an essential characteristic of the contemporary language classroom. This research furthers the understanding of Social and Emotional Competence (SEC) as a critical professional resource used by teachers in the delivery of multimodal ELT instruction and contributes to the definition of teacher expertise as holistic rather than limited to simply technical and methodological skills.

Theoretical contributions to this study have expanded, developing theoretical models of SEC by situating SEC within the practice of multimodal pedagogy. Prior research has identified the importance of SEC in relation to teacher effectiveness and teacher well-being (Durlak et al., 2020; Lozano-Peña et al., 2021). However, few studies focus on the ability of teachers to support SEC under the increased cognitive and emotional demands placed on teachers when working with digitally-mediated instructional modalities. Therefore, this study's empirical investigation of SEC as a mediating construct between multimodal instructional complexity and teacher performance advances the development of theoretical models of teacher competence in technology-enhanced language learning environments.

From a pedagogical perspective, the findings of this study contribute evidence-based insights that can be directly applied to the areas of teacher education and professional development for teachers of English as a Foreign Language (EFL). The inclusion of SEC training as part of a multimodal instructional module illustrates how Teachers can purposefully develop their emotional regulation, empathy, and

interpersonal communication skills along with pedagogical and digital competencies. This study's findings offer Teacher Educators suggestions for the design of training experiences that prepare pre-service teachers to manage the complexities of their classrooms, remain emotionally stable, and create a supportive learning environment in multimodal settings (Keshishi & Hack, 2023; Schonert-Reichl et al., 2024). These insights will also be of value to people working in ELT, where learners' linguistic vulnerability and anxiety increase the need for emotionally influenced teaching to be used.

The comparative nature of the study (i.e., how male and female trainees use SEC in multimodal class settings) adds to the importance of this research in supporting a more complex and equitable approach to the understanding of how teaching professionals would develop. Instead of looking at this through a deficit-laden paradigm, this study reveals distinct differences in how male and female teacher-trainees participate in SEC when working with students in multimodal classrooms. These findings highlight the need for teacher trainees to receive gender-specific guidance and support related to their diverse emotional strengths and development, but without reinforcing essentialist notions of what constitutes gender. (Küçükakın, 2024). By using empirical evidence to document the gendered ways that SEC is employed by teacher-trainees, this study contributes to the development of inclusive and adaptive models for teacher-training.

The present study provides essential guidance at both programmatic and policy levels for implementing revisions to the ELT curriculum and for reforming existing teacher education programs. The findings of the present study support previous recommendations to add the inclusion of SEC as an element in teacher competency frameworks; this is especially applicable for programs focusing on Technology Enhanced and Multimodal teaching (Pham, 2024). The addition of SEC-related goals, tools for assessing teacher effectiveness, and reflective practice within ELT curriculum development will provide opportunities to improve overall quality of instruction, alleviate teacher stress, and create a more sustainable profession. In this regard, the present study aligns with broader educational objectives aimed at improving teacher well-being, equity, and holistic teacher development.

Overall, the findings of the present study provide significant contributions in both the practical and empirical contexts of the ongoing discussions around multimodal pedagogy, social-emotional learning, and Teacher Preparation. By including the development of SEC within multimodal ELT training and assessing the implications through a gendered perspective, this research addresses a major gap in the existing literature and provides actionable insights for the development of theoretical, practical, and policy implications in relation to current Teacher Preparation Practices within ELT.

### **Purpose of the Study**

The goal of this research is to evaluate how social-emotional competence (SEC) affects the implementation of multimodal instructional methods for pre-service English Language Teaching (ELT) educators. More specifically, this study analyzes whether training with a multimodal instructional module that includes infusing SEC into it impacts the overall development of trainees' SEC and the key sub-dimensions of SEC, such as emotional regulation, empathy, and interpersonal communication, and compares the relative effectiveness of multimodal instruction for male and female trainees regarding their SEC development and instructional application in multimodal teaching.

To do this, a mixed-methods quasi-experimental design was used to assess the quantitative change in SEC over time and to explore qualitative differences in how male and female trainees apply social-emotional competencies throughout the process of executing multimodal micro-teaching activities. This dual approach will help build an empirical and pedagogical foundation for the development of

emotionally-sensitive and gender-sensitive training models that are designed to meet the needs of today's technology-rich language classroom.

## **Research Questions and Null Hypotheses**

### **Research Questions**

1. Does participation in a multimodal instruction training module infused with SEC development affect the overall SEC levels of pre-service ELT teacher trainees?
2. Is there any significant gender-based difference in the way male and female ELT teacher trainees develop and apply social-emotional competence in managing multimodal classroom instruction?

### **Research Null Hypotheses**

H<sub>01</sub>: Participation in a multimodal instruction training module infused with SEC development does not affect the overall SEC levels of pre-service ELT teacher trainees.

H<sub>02</sub>: There are no significant gender-based differences in the way male and female ELT teacher trainees develop and apply social-emotional competence in managing multimodal classroom instruction.

## **Literature Review**

### **Social-Emotional Competence in Teacher Education**

Social-emotional competence (SEC) is a constellation of interrelated abilities that allow a person to recognize and express emotions while also helping them navigate their productive social interactions (Durlak et al., 2020; Pham, 2024). In teacher education, social-emotional competence generally includes the following areas: emotional regulation, empathy, self-awareness, effective interpersonal communication, and being responsible while making decisions (CASEL, 2020; Lozano-Peña et al., 2021). These social-emotional competencies have been increasingly recognized as being critical to the success of teachers (Schonert-Reichl et al., 2024; Slovak & Fitzpatrick, 2015). Their level of social-emotional competence will influence how well teachers are able to effectively create and maintain positive classroom climates and the quality of their instruction, as well as their own well-being as a teacher (Durlak et al., 2020; Jennings & Greenberg, 2009).

Since 2020, empirical evidence has consistently shown that teachers who are highly skilled in social-emotional competence will have better skills for managing stress in the classroom, developing and maintaining positive teacher-student relationships, and adapting their instruction to meet the emotional and cognitive needs of their learners (Durlak et al., 2020; Schonert-Reichl et al., 2024; Slovak & Fitzpatrick, 2015). In addition, research from pre-service contexts has demonstrated a positive correlation between the development of social-emotional competence and reduced teaching anxiety, improved self-efficacy, and increased instructional flexibility (Keshishi & Hack, 2023; Lozano-Peña et al., 2021). Importantly, social-emotional competence has transformed from an inborn characteristic of an individual

to a skill that can be developed with targeted training and regular reflection practices (Pham, 2024; Schonert-Reichl et al., 2024).

While the establishment of social-emotional competence in teacher education has progressed, most of the literature focusing on social-emotional competence has examined teacher development in general classroom contexts (Durlak et al., 2020; Jennings & Greenberg, 2009). This has been especially limiting in the current era of digitally mediated and multimodal teaching, where teachers must simultaneously manage the teaching of subject matter and technological aspects along with the interpersonal interaction (Manowaluilou et al., 2024; Mayer, 2020).

### **Multimodal Instruction and Emotional Demands in ELT**

According to Mayer (2021), multimodal instruction can be defined as “using linguistic, visual, auditory, gestural, and digital semiotic resources together” to facilitate learning (Mayer, 2020, p. 15). In ELT, the use of different forms of semiotic representation to facilitate language learning is particularly important, as language is inherently a form of communication that takes place within a specific context, and has a meaning behind every word (Lotherington, 2011; Manowaluilou et al., 2024; Vidosavljevic, 2022). By providing visual images, sounds, digital tools, and interactive activities, multimodal teaching provides an additional layer of understanding and supports student engagement, especially for students who have linguistic diversity (Lotherington, 2011; Mayer, 2020; Vidosavljevic, 2022).

Recent studies, however, have shown that the demand for teaching using multiple modes increases teachers' cognitive and emotional burden significantly (Manowaluilou et al., 2024; Slovak & Fitzpatrick, 2015). Teaching with multiple modes requires simultaneous coordination of multiple modes in a collaborative environment (Manowaluilou et al., 2024; Mayer, 2020). These multiple demands create increased emotional demands on teachers (Jennings & Greenberg, 2009; Slovak & Fitzpatrick, 2015). Teachers who do not have strong emotional intelligence and awareness may find it difficult to provide sustainable and emotionally supportive learning environments (Lozano-Peña et al., 2021; Schonert-Reichl et al., 2024). Fortunate teachers who do possess strong emotional intelligence and awareness are better able to deal with uncertainty, adapt to unexpected interruptions, and create and maintain emotionally supportive classrooms (Keshishi & Hack, 2023; Slovak & Fitzpatrick, 2015).

Research shows that in order for multimodal teaching to be effective, teachers need a high degree of emotional intelligence and awareness to provide an appropriate amount of support through strong emotional scaffolding during multimodal instruction (Lozano-Peña et al., 2021; Slovak & Fitzpatrick, 2015). For teachers who do not possess this type of emotional intelligence and awareness, the experience of teaching with multiple modes may result in an overwhelming amount of stress and create delivery that is fragmented as well as increased emotional stress and diminished responsiveness to their students (Jennings & Greenberg, 2009; Manowaluilou et al., 2024). Conversely, teachers who do possess strong emotional intelligence and awareness are better prepared to create and maintain emotionally supportive learning environments, which provide the emotional support necessary for student success (Schonert-Reichl et al., 2024; Slovak & Fitzpatrick, 2015). However, there is still a lack of empirical evidence explicitly connecting social-emotional competency to a teacher's ability to deliver instruction multimodally in ELT (Lotherington, 2011; Manowaluilou et al., 2024; Vidosavljevic, 2022).

### **Gender Differences in Social-Emotional Competence**

Many contemporary studies support the continued emergence of gender as a relevant (although complex) variable for research into social-emotional competency (Küçükakın, 2024; Pham, 2024). However, as research continues to caution against adopting essentialist views of gender, there are strong

indications that socialization experiences associated with gender may have an effect on how individuals express or regulate emotions as well as on social interaction and relational behavior (Küçükakın, 2024; Slovak & Fitzpatrick, 2015). For instance, female educators are generally reported to have more empathy, greater emotional awareness, and to demonstrate a higher degree of relational engagement than male educators, who demonstrate a greater capacity to regulate their emotions and manage classroom behavior (Pham, 2024; Schonert-Reichl et al., 2024; Slovak & Fitzpatrick, 2015).

These differing presentations do not indicate that one gender is superior or inferior to the other, but rather represent the individual educator's different deployment of SEC (social-emotional competency) (Pham, 2024; Küçükakın, 2024). Teacher training programs that incorporate gender-responsive approaches to teacher training emphasize the importance of acknowledging and balancing these differing presentations in order to better support the educator's overall professional development (Lozano-Peña et al., 2021; Schonert-Reichl et al., 2024). However, the majority of the previous research has not evaluated how the differences between male and female educators in social-emotional competency are impacted by the way they teach, leaving unanswered questions regarding how SEC interacts with gender in multimodal teaching contexts (Lotherington, 2011; Manowaluilou et al., 2024; Vidosavljevic, 2022).

In reference to ELT, there have been few studies that have employed gender-sensitive analysis (Keshishi & Hack, 2023; Lotherington, 2011; Vidosavljevic, 2022). Language learning is often associated with significant levels of emotional vulnerability (e.g., communication apprehension, negotiation of identity, etc.), and therefore, how male and female educators deploy SEC in the teaching of languages in multimodal contexts should be investigated in a systematic manner (Küçükakın, 2024; Pham, 2024).

### **Integrating SEC into Multimodal ELT Teacher Training**

Currently, there are many arguments for the inclusion of Social-Emotional Competencies (SEC) into teacher preparation programs, and the use of technology in such programs, on a more explicit level (Keshishi & Hack, 2023; Lozano-Peña et al., 2021; Schonert-Reichl et al., 2024). The effective integration of SEC throughout the teacher training process involves more than the use of a “one-size-fits-all” workshop approach (Lozano-Peña et al., 2021; Pham, 2024). The integration of SEC into the instructional design, assessment, and reflective practice needs to happen throughout the program (Durlak et al., 2020; Schonert-Reichl et al., 2024).

SEC-infused teacher preparation programs have been shown to increase classroom management, self-efficacy, and teacher resilience (Lozano-Peña et al., 2021; Schonert-Reichl et al., 2024). This is particularly true for Teacher Education Programs (TEP) delivering ELT teacher training because the teachers trained within a TEP have to consider how to support students from linguistic, cultural, and emotional perspectives simultaneously (Keshishi & Hack, 2023; Lotherington, 2011; Vidosavljevic, 2022).

Empirical models of how the SEC is part of a multimodal instructional strategy, and what the proper conditions are within which it enhances the instructional effectiveness of that strategy, are underdeveloped (Manowaluilou et al., 2024; Slovak & Fitzpatrick, 2015). The limited conceptualization of SEC interventions in ELT teacher preparation limits the ability to replicate and transfer these types of interventions into other teacher preparation programs (Lozano-Peña et al., 2021; Schonert-Reichl et al., 2024).

### **Rationale for the Conceptual Model**

This conceptual model seeks to address the gaps in the existing body of research about ELT teachers' education, multimodal instruction, and Social-Emotional Learning based on the need for further investigation into these three areas and their relationship with each other (Durlak et al., 2020; Mayer, 2020). Recent studies have identified the importance of both multimodal pedagogy and Social-Emotional Competence as individual constructs (Mayer, 2020; Schonert-Reichl et al., 2024). However, the majority of research has investigated multimedia pedagogy and Social-Emotional Competence separately rather than as interdependent constructs (Manowaluilou et al., 2024; Slovak & Fitzpatrick, 2015). The concept of multimodal instruction tends to be understood primarily as a cognitive or technical issue, and social-emotional competence has generally been approached as a universal trait or as the result of teacher well-being (Jennings & Greenberg, 2009; Pham, 2024). Compartmentalized views fail to recognize the complexities of the roles of teachers in contemporary ELT classrooms, where teachers must deal with multiple modes of representation simultaneously, manage their students' emotions, and create opportunities for relevant social interaction (Lotherington, 2011; Mayer, 2020; Vidosavljevic, 2022).

Social and Emotional Learning Theory (CASEL, 2020) provides this study with a lens through which Social-Emotional Competence (SEC) can be investigated (Durlak et al., 2020; Lozano-Peña et al., 2021). In this study, the concept of SEC has been described as a dynamic, developmental professional competence that affects the way teachers perceive, interpret, and respond to their educational demands (Pham, 2024; Schonert-Reichl et al., 2024). SEL principles show that emotional regulation, empathy, and interpersonal skills are not additions to teaching but necessary components for effective instructional decision making (CASEL, 2020; Jennings & Greenberg, 2009). The addition of these principles to the multimodal context is vital for teachers who must contend with uncertainty, cognitive overload, and frequent interruptions in technology while they seek to maintain instructional consistency and student participation (Manowaluilou et al., 2024; Mayer, 2020).

The Multimodal Learning Theory (Mayer, 2020) highlights the fact that effective instruction will require the integration of multiple semiotic resources (Lotherington, 2011; Mayer, 2020; Vidosavljevic, 2022). Whereas this model has, to date, primarily been focused on cognitive processing by the learner, the impact of this model on teachers' emotional and social functioning has been further researched and developed (Manowaluilou et al., 2024; Slovak & Fitzpatrick, 2015). This model highlights the role of the SEC in helping instructors navigate the emotional and social demands of teaching using multimodal instruction (Lozano-Peña et al., 2021; Schonert-Reichl et al., 2024). Success in teaching using multimodal methods is contingent upon how well teachers regulate emotion, how effective teachers are at being empathetic, and how well they communicate when the demands of the mode of instruction are at their highest level (Jennings & Greenberg, 2009; Slovak & Fitzpatrick, 2015).

Including gender as a moderating variable aligns with the current emphasis on equitable, nuanced, and multidimensional approaches to research in teacher education (Küçükakın, 2024; Pham, 2024). Instead of treating gender as a categorical predictor of competence, the model conceptualizes gender as a contextual factor influencing the patterns of SEC development and enactment (Küçükakın, 2024; Schonert-Reichl et al., 2024). Gender shapes the experience of SEC development and enactment due to differences in socialization and professional expectations (Küçükakın, 2024) and is, therefore, not treated as an essentialized descriptor; rather, it accommodates an empirical study of the variety of emotional and instructional practices in existence (Pham, 2024; Slovak & Fitzpatrick, 2015).

In combination, the proposed framework is an integrative approach to connect the multiple instructional demands for ELT instructors with the social-emotional competency of the instructors and the instructional outcomes for the instructors based on the type of instruction delivered to English language learners through teacher training programs (Durlak et al., 2020; Mayer, 2020). It provides a theoretically based solution to the fragmented research on this topic by providing an integrated conceptual framework

for studying how emotional competencies work in classroom situations using technology-enhanced pedagogies (Lozano-Peña et al., 2021; Manowaluilou et al., 2024).

### **Description of the Conceptual Model**

Based upon previous research, this theoretical model proposes that multimodal instruction is a complex pedagogical environment through which the experience of trainees in Teaching English to Speakers of Other Languages (TESOL) increased cognitive, emotional, and interpersonal demands (Manowaluilou et al., 2024; Mayer, 2020). Multimodal instruction involves integrating different forms of linguistic, visual, auditory, and digital modes of communication simultaneously, requiring teachers to coordinate multiple streams of information while maintaining instructional flow and learner engagement (Lotherington, 2011; Mayer, 2020; Vidosavljevic, 2022). As such, these demands create the context from which teacher trainees experience the greatest instructional pressure associated with teaching in a multimodal environment (Jennings & Greenberg, 2009; Slovak & Fitzpatrick, 2015).

Social-emotional competence (SEC) is positioned centrally in the model as a mediating influence rather than as a static trait (Pham, 2024; Schonert-Reichl et al., 2024). SEC is conceptualized as an active regulatory system that determines how teacher trainees respond to the cognitive and emotional demands of multimodal instruction (Durlak et al., 2020; Lozano-Peña et al., 2021). The three core components of SEC—emotional regulation, empathy, and interpersonal communication—provide teacher trainees with the tools necessary to manage stress, interpret learners’ emotional signals, and facilitate constructive interactions throughout instruction delivered across multiple modes (Jennings & Greenberg, 2009; Slovak & Fitzpatrick, 2015).

Emotional regulation supports the maintenance of composure during periods of heightened stress, such as technological disruptions or increased instructional complexity (Lozano-Peña et al., 2021; Manowaluilou et al., 2024). Empathy enables sensitivity to learners’ affective and emotional needs, particularly in linguistically and culturally diverse ELT contexts (Lotherington, 2011; Pham, 2024; Vidosavljevic, 2022). Interpersonal communication facilitates clear, adaptive, and supportive instructional exchanges that sustain learner engagement across modalities (Schonert-Reichl et al., 2024; Slovak & Fitzpatrick, 2015).

Instructional outcomes are conceptualized as the distal component of the model and include multimodal teaching effectiveness, classroom management quality, and learner engagement (Mayer, 2020; Schonert-Reichl et al., 2024). The model proposes that multimodal instruction alone does not directly guarantee positive instructional outcomes; rather, outcomes are enhanced through the mediating role of SEC (Durlak et al., 2020; Slovak & Fitzpatrick, 2015). Well-developed SEC enables teachers to leverage multimodal strategies effectively, whereas a limited SEC may result in increased stress, instructional fragmentation, and reduced responsiveness to learners (Jennings & Greenberg, 2009; Manowaluilou et al., 2024).

Gender is incorporated into the model as a moderating variable influencing the development and enactment of SEC within multimodal instructional contexts (Küçükakın, 2024; Pham, 2024). The model does not assume inherent gender differences but conceptualizes gender as socially constructed through cultural norms and professional expectations that shape emotional expression, classroom authority, and relational practices (Küçükakın, 2024; Schonert-Reichl et al., 2024). Gender is therefore proposed to moderate the pathways through which SEC components—particularly empathy, emotional regulation, and classroom interaction—affect multimodal instructional performance (Keshishi & Hack, 2023; Slovak & Fitzpatrick, 2015).

Overall, the conceptual model represents an interconnected and dynamic system linking multimodal instructional demands, social-emotional competence, and instructional outcomes within ELT teacher education (Durlak et al., 2020; Mayer, 2020). By explicitly modeling these interrelationships, the framework advances beyond linear explanations of teaching effectiveness and provides a holistic account of how emotional and instructional processes intersect in technology-enhanced ELT classrooms (Lozano-Peña et al., 2021; Manowaluilou et al., 2024).

### **How the Conceptual Model Informs the Study Design**

The conceptual framework directly informs the methodological design of the study, guiding the selection of variables, instruments, and analytic strategies (Durlak et al., 2020; Schonert-Reichl et al., 2024). First, the incorporation of SEC skills into a multifaceted teacher training program reflects the model's central premise that social-emotional competence underpins effective multimodal instruction (Lozano-Peña et al., 2021; Pham, 2024). The model identifies emotional regulation, empathy, and interpersonal communication as the primary mechanisms through which instructional effectiveness is enhanced in multimodal contexts (Jennings & Greenberg, 2009; Slovak & Fitzpatrick, 2015).

Second, the use of pre-test and post-test measures to assess SEC aligns with the model's developmental perspective, emphasizing that SEC can be strengthened through targeted intervention and reflective practice (Keshishi & Hack, 2023; Schonert-Reichl et al., 2024). Evaluating changes in SEC before and after participation in the multimodal training program allows for the examination of developmental growth and provides empirical support for the mediating role of SEC (Durlak et al., 2020; Lozano-Peña et al., 2021).

Third, the assessment of multimedia micro-teaching performance operationalizes the instructional outcomes component of the model (Manowaluilou et al., 2024; Mayer, 2020). Performance rubrics focusing on classroom management, instructional clarity, and learner engagement capture how SEC is translated into observable teaching behavior during multimodal instruction (Schonert-Reichl et al., 2024; Slovak & Fitzpatrick, 2015). Linking improvements in instructional performance to changes in SEC provides empirical evidence for the proposed mediation pathways within the model (Durlak et al., 2020; Jennings & Greenberg, 2009).

Fourth, the inclusion of gender-based comparative analyses operationalizes the model's moderation hypothesis (Küçükakın, 2024; Pham, 2024). By examining differences in how male and female trainees develop and enact SEC during multimodal teaching, the study tests whether gender influences the strength or direction of the relationships among SEC, instructional demands, and instructional outcomes (Keshishi & Hack, 2023; Slovak & Fitzpatrick, 2015).

Finally, the integration of qualitative data from reflective journals and peer feedback provides additional interpretive depth and supports methodological triangulation (Lozano-Peña et al., 2021; Schonert-Reichl et al., 2024). Thematic analysis of trainees' reflections offers insight into how emotional regulation, empathy, and interpersonal communication are experienced and enacted during multimodal teaching, strengthening construct validity and enriching the interpretation of quantitative findings (Durlak et al., 2020; Pham, 2024).

In summary, the conceptual model functions both as a guide for intervention design and as an analytic framework for evaluating study outcomes. By aligning theory, methodology, and analysis, the model enhances the coherence, rigor, and explanatory power of the research within the field of ELT teacher education (Lozano-Peña et al., 2021; Mayer, 2020).

**Figure 1.**  
*Conceptual model of social-emotional competence in multimodal ELT instruction*

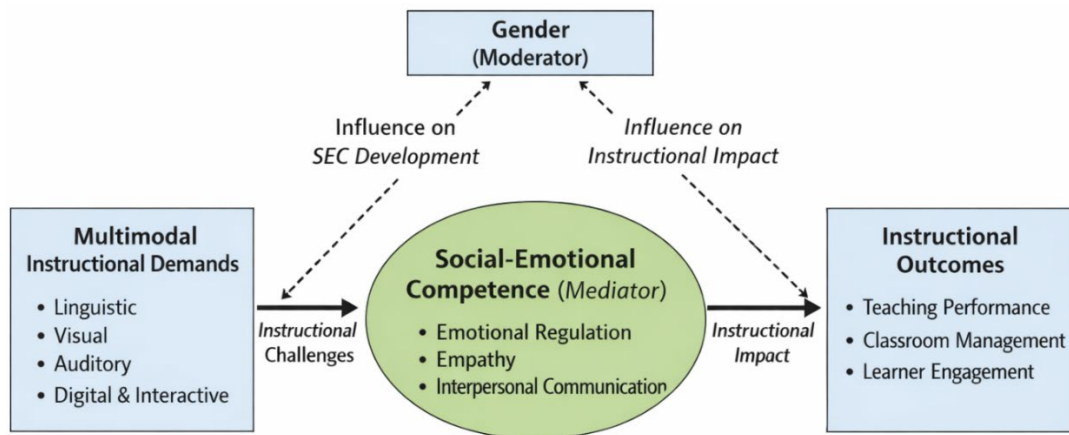


Figure 1 above illustrates the conceptual relationships guiding the design and analysis of the present study. The model illustrates how multimodal instructional demands—comprising linguistic, visual, auditory, and digital-interactive elements—create instructional challenges that require effective management by ELT teacher trainees. Social-emotional competence (SEC) is positioned as a mediating construct through which these demands influence instructional outcomes, including teaching performance, classroom management, and learner engagement. The model further incorporates gender as a moderating variable, indicating that gender-related patterns may shape both the development and enactment of SEC in multimodal instructional contexts. By integrating instructional, emotional, and contextual variables, the figure visually represents the theoretical assumptions underlying the study design and data analysis.

## Methodology

### Research Design

This study employed a mixed-methods, quasi-experimental pre-test/post-test design with a gender-based comparative component. The quantitative strand examined changes in social-emotional competence (SEC) following participation in a multimodal instruction training module infused with SEC development, as well as gender-based differences in post-intervention outcomes. The qualitative strand

explored how teacher trainees experienced and enacted SEC during multimodal instruction, providing explanatory depth to the quantitative findings.

This design was selected to align with the conceptual model of the study, which positions SEC as a mediating construct between multimodal instructional demands and instructional outcomes, with gender as a moderating variable. The integration of quantitative and qualitative data enabled triangulation and strengthened the validity of inferences regarding both developmental change and instructional enactment.

## **Participants**

The participants were 50 pre-service English Language Teaching (ELT) teacher trainees (25 male and 25 female) enrolled in a teacher education program at Safir Language Academy. Participants ranged in age from 22 to 28 years and had completed foundational coursework in ELT methodology, classroom management, and instructional technology prior to the study.

Participants were selected through convenience sampling, as they were enrolled in a required instructional methods course during the data collection period. All participants volunteered to take part in the study and provided informed consent. To reduce potential bias, participation or performance in the study had no impact on course grades.

## **Ethical Considerations**

Participants were informed of the study's purpose, procedures, and their right to withdraw at any time without penalty. All data were anonymized using numerical identifiers, and confidentiality was maintained throughout data analysis and reporting. Reflective journals and peer feedback were used solely for research purposes and were not shared with course instructors for evaluative decisions.

## **Instructional Intervention**

### **SEC-Infused Multimodal Training Module**

The instructional intervention consisted of a four-week training module designed to integrate multimodal instructional strategies with explicit SEC development. Each week included a 90-minute session combining theoretical input, guided practice, and reflective activities.

The module addressed two interrelated strands:

1. **Multimodal Instructional Skills**, including:
  - integrating visual, auditory, and digital resources,
  - managing online and blended classroom interactions,
  - handling technological disruptions and pacing multimodal lessons.
2. **Social-Emotional Competence Development**, including:
  - emotional regulation strategies for instructional stress,
  - empathy-focused reflection on learner engagement,
  - interpersonal communication and classroom presence.

SEC activities were embedded directly into multimodal tasks rather than taught as standalone components, reflecting the mediating role of SEC proposed in the conceptual model.

## Instruments

### Social-Emotional Competence Scale

Participants' social-emotional competence was measured using an adapted version of the Teacher Social-Emotional Competence Inventory (2020 revision). The scale consisted of Likert-type items (1 = strongly disagree to 5 = strongly agree) measuring three sub-dimensions, namely, emotional regulation, empathy, and interpersonal communication.

The adapted scale demonstrated strong internal consistency in the present study (Cronbach's  $\alpha = .87$  for the total scale; subscale alphas ranged from .81 to .85). Content validity was established through expert review by two ELT teacher educators and one educational psychologist.

### Multimodal Teaching Performance Rubric

Participants' instructional performance was assessed using a multimodal micro-teaching performance rubric, developed for the study based on existing teacher-performance frameworks. The rubric evaluated four criteria such as classroom management, clarity and coherence of multimodal integration, learner engagement, and responsiveness to disruptions.

Each criterion was rated on a five-point scale. Inter-rater reliability was established through independent scoring by two trained raters (intra-class correlation coefficient = .82), indicating satisfactory agreement.

### Qualitative Instruments

Qualitative data were collected through:

- **Reflective journals**, in which participants documented emotional experiences, challenges, and instructional decisions during multimodal teaching.
- **Peer feedback forms**, focusing on observed emotional regulation, communication style, and classroom presence.

These instruments provided insight into the mechanisms through which the SEC influenced instructional practice.

### Procedure

At the beginning of the study, participants completed the SEC pre-test and delivered an initial multimodal micro-teaching lesson. Following the four-week SEC-infused training module, participants completed the SEC post-test and delivered a second micro-teaching lesson under comparable instructional conditions.

Reflective journals were collected weekly, and peer feedback was obtained after each micro-teaching session. All quantitative and qualitative data were collected within the same academic term to ensure consistency of instructional context.

## Data Analysis

The data analysis procedures were designed to align closely with the study's research questions, hypotheses, and conceptual model, which positions social-emotional competence (SEC) as a mediating construct between multimodal instructional demands and instructional outcomes, with gender as a moderating variable. A concurrent mixed-methods analytical approach was adopted, in which quantitative and qualitative data were analyzed separately and subsequently integrated to enhance interpretive validity.

### Preliminary Data Screening and Assumption Testing

Prior to inferential analysis, quantitative data were screened to ensure accuracy and suitability for parametric statistical procedures. The dataset was examined for missing values, outliers, and entry errors. No missing data were detected, and no extreme outliers were identified.

Normality of score distributions for SEC total and subscale scores was assessed using skewness and kurtosis indices, all of which fell within the acceptable range of  $\pm 1$ . Homogeneity of variance for gender-based comparisons was evaluated using Levene's test and found to be non-significant ( $p > .05$ ). These results supported the use of parametric statistical analyses, including *t*-tests and Analysis of Variance (ANOVA).

### Quantitative Data Analysis Analysis Addressing Research Question 1

To examine whether participation in the SEC-infused multimodal training module resulted in changes in social-emotional competence, paired-samples *t*-tests were conducted using SPSS (Version 26) comparing pre-test and post-test scores for the total sample ( $N = 50$ ). This statistical procedure was selected because it is appropriate for assessing mean differences within the same group across two time points. Analyses were conducted for total SEC scores and each SEC sub-dimension (emotional regulation, empathy, and interpersonal communication). Statistical significance was evaluated at the  $\alpha = .05$  level. In addition to *p*-values, Cohen's *d* was calculated for each comparison to assess the magnitude of observed effects. Reporting effect sizes was essential to determine the educational meaningfulness of the intervention beyond statistical significance.

### Analysis Addressing Research Question 2

To investigate gender-based differences in the development and application of SEC, one-way analysis of variance (ANOVA) was conducted on post-test SEC scores and instructional performance indicators, with gender (male/female) as the independent variable. ANOVA was selected as it allows for systematic comparison of mean differences between independent groups while controlling for within-group variability.

Where statistically significant differences were detected, partial eta squared ( $\eta^2$ ) was reported to estimate effect size and interpret the practical significance of gender-related differences. Effect sizes were interpreted using established benchmarks, with values of .01, .06, and .14 representing small, medium, and large effects, respectively.

Although the conceptual model positions gender as a moderating variable, the present study did not employ formal moderation analysis due to sample size constraints. Instead, gender-based group comparisons were used as an analytically appropriate and statistically defensible approach for examining differential patterns of SEC development and instructional enactment in a quasi-experimental design.

## **Analysis of Multimodal Teaching Performance**

To assess changes in multimodal instructional performance following the intervention, paired-samples t-tests were conducted separately for male and female trainees, comparing pre-training and post-training rubric scores. This approach enabled examination of instructional growth within each gender group while remaining consistent with the study's comparative focus.

Descriptive statistics were reported alongside inferential results to facilitate transparent interpretation of instructional improvement patterns.

## **Qualitative Data Analysis**

Qualitative data from reflective journals and peer feedback forms were analyzed using inductive thematic analysis. This approach was selected to allow themes to emerge from participants' lived experiences rather than imposing predefined categories.

The analysis followed a multi-stage process:

1. Familiarization with the data through repeated reading.
2. Initial open coding was conducted independently by two researchers.
3. Code comparison and refinement through collaborative discussion.
4. Development of broader themes capturing recurring patterns related to SEC use and multimodal instruction.

To enhance credibility and trustworthiness, analyst triangulation was employed, and themes were cross-validated across data sources (journals and peer feedback). Representative excerpts were identified to illustrate key themes in the Results section.

## **Integration of Quantitative and Qualitative Findings**

Following separate analyses, quantitative and qualitative findings were integrated at the interpretation stage. Quantitative results provided evidence of SEC development and gender-based differences, while qualitative findings offered explanatory insight into how and why these patterns emerged during multimodal teaching. This integrative approach strengthened construct validity and allowed for a richer understanding of SEC as a mediating resource in multimodal ELT instruction.

## **Results**

This section presents the quantitative and qualitative findings of the study in direct alignment with the research questions and hypotheses. Quantitative results are reported first, followed by qualitative findings that illuminate how social-emotional competence (SEC) was enacted during multimodal instruction. Interpretation of findings is reserved for the Discussion section.

### **Results Related to Research Question 1**

Does participation in a multimodal instruction training module infused with SEC development affect the overall SEC levels of ELT teacher trainees?

To address Research Question 1, paired-samples *t*-tests were conducted to compare pre-test and post-test scores on the SEC scale for the total sample ( $N = 50$ ).

### Changes in Overall Social-Emotional Competence

As can be seen in Table 1 below, results indicated a statistically significant increase in overall SEC following participation in the SEC-infused multimodal training module. Table 1 shows post-test scores ( $M = 3.78$ ,  $SD = 0.39$ ) were significantly higher than pre-test scores ( $M = 3.12$ ,  $SD = 0.41$ ),  $t(49) = 9.46$ ,  $p < .001$ . The effect size was large (Cohen's  $d = 1.34$ ), indicating substantial practical significance.

**Table 1.**  
*Pre- and post-test differences in social-emotional competence (N = 50)*

SEC Dimension	Pre-Test M (SD)	Post-Test M (SD)	t	p	Cohen's d
Total SEC	3.12 (.41)	3.78 (.39)	9.46	< .001	1.34
Emotional Regulation	3.05 (.46)	3.74 (.42)	8.21	< .001	1.16
Empathy	3.18 (.44)	3.89 (.37)	8.97	< .001	1.27
Interpersonal Communication	3.07 (.43)	3.69 (.40)	7.88	< .001	1.11

### Changes in SEC Sub-Dimensions

Table 1 above also showed significant pre- to post-test gains across all SEC sub-dimensions:

- Emotional regulation:  $t(49) = 8.21$ ,  $p < .001$ ,  $d = 1.16$
- Empathy:  $t(49) = 8.97$ ,  $p < .001$ ,  $d = 1.27$
- Interpersonal communication:  $t(49) = 7.88$ ,  $p < .001$ ,  $d = 1.11$

All effect sizes exceeded the threshold for large effects, indicating that the intervention was associated with meaningful improvements in trainees' social-emotional competence.

**Figure 2.**  
*Pre- and post-test changes in social-emotional competence*

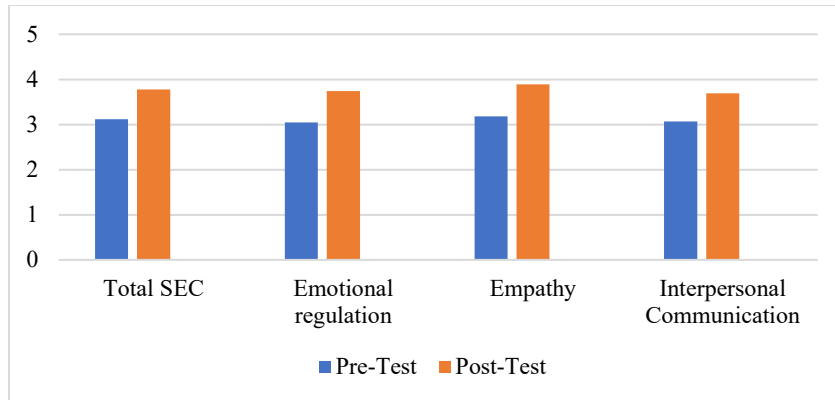


Figure 2 illustrates pre-test and post-test mean scores for overall social-emotional competence and its key sub-dimensions following participation in the SEC-infused multimodal instruction training module. The figure shows a consistent upward trend from pre-test to post-test across all measured dimensions, including emotional regulation, empathy, and interpersonal communication. This visual pattern indicates that participants demonstrated improvement in social-emotional competence after the instructional intervention. The figure complements the statistical results by highlighting the magnitude and consistency of gains across dimensions, thereby providing an accessible visual summary of the intervention's overall impact. Based on these results, the first Null Hypothesis was rejected.

## Results Related to Research Question 2

Is there any significant gender-based difference in how male and female ELT teacher trainees develop and apply SEC in multimodal classroom instruction?

To address Research Question 2, one-way ANOVA analyses were conducted on post-test SEC scores and instructional performance indicators, with gender as the independent variable.

### Gender Differences in Post-Test SEC Scores

As presented in Table 2 below, statistically significant gender-based differences were found across several SEC dimensions.

**Table 2.**  
*Gender differences in post-test social-emotional competence*

SEC Dimension	Male M (SD)	Female M (SD)	F	p	Partial $\eta^2$
Emotional Regulation	3.82 (.38)	3.66 (.41)	4.12	.048	.08
Empathy	3.65 (.36)	4.12 (.31)	12.87	< .001	.21
Interpersonal Communication	3.58 (.39)	3.94 (.34)	10.24	.002	.18
Classroom Control	3.91 (.35)	3.72 (.37)	5.06	.029	.09

Female trainees demonstrated significantly higher post-test scores in Empathy ( $F(1, 48) = 12.87, p < .001$ , partial  $\eta^2 = .21$ ) and Interpersonal communication ( $F(1, 48) = 10.24, p = .002$ , partial  $\eta^2 = .18$ ).

However, male trainees scored significantly higher in Emotional Regulation ( $F(1, 48) = 4.12, p = .048$ , partial  $\eta^2 = .08$ ) and Classroom control ( $F(1, 48) = 5.06, p = .029$ , partial  $\eta^2 = .09$ ). Effect sizes ranged from moderate to large, indicating meaningful gender-related differences. The findings indicate moderate to large gender effects. Female trainees demonstrated significantly higher levels of empathy and interpersonal communication, whereas male trainees scored higher on emotional regulation and classroom control. These results justify the rejection of the second null hypothesis and support a differentiated understanding of SEC deployment across genders.

**Figure 3.**  
*Gender differences in post-test social-emotional competence*

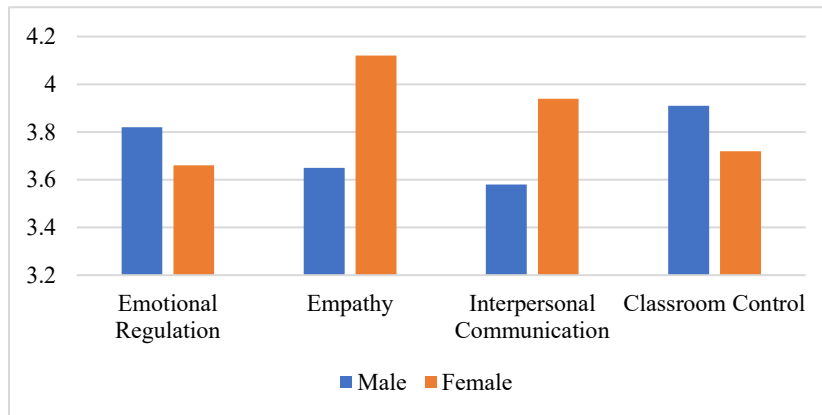


Figure 3 displays gender-based differences in post-test social-emotional competence scores across selected dimensions. The visual comparison indicates variation in mean scores between male and female ELT teacher trainees, with female trainees demonstrating higher mean levels in empathy and interpersonal communication, while male trainees show slightly higher scores in emotional regulation and classroom control. These patterns suggest differentiated profiles of social-emotional competence enactment following the intervention. The figure is intended to illustrate comparative trends rather than imply fixed or inherent gender differences, and it provides visual support for the inferential analyses reported in the Results section. Based on these findings, Null Hypothesis 2 was rejected.

### Multimodal Teaching Performance Outcomes

To examine instructional performance, paired-samples  $t$ -tests were conducted separately for male and female trainees, comparing pre-training and post-training multimodal micro-teaching scores.

Table 3 below presents the pre- and post-training multimodal teaching performance scores for male and female trainees, including means, standard deviations,  $t$ -values, and significance levels. For male trainees, the pre-test mean score was 3.14 ( $SD = .37$ ), which increased to a post-test mean of 3.81 ( $SD = .34$ ). This improvement was statistically significant,  $t(24) = 7.62, p < .001$ . Similarly, female trainees showed an increase from a pre-test mean of 3.21 ( $SD = .35$ ) to a post-test mean of 3.88 ( $SD = .31$ ), with the difference also reaching statistical significance,  $t(24) = 8.04, p < .001$ . Overall, the results indicate that both male and female trainees experienced significant gains in their multimodal teaching performance following the training program. However, although both groups improved, descriptive patterns indicated differing instructional emphases, which were further explored through qualitative analysis.

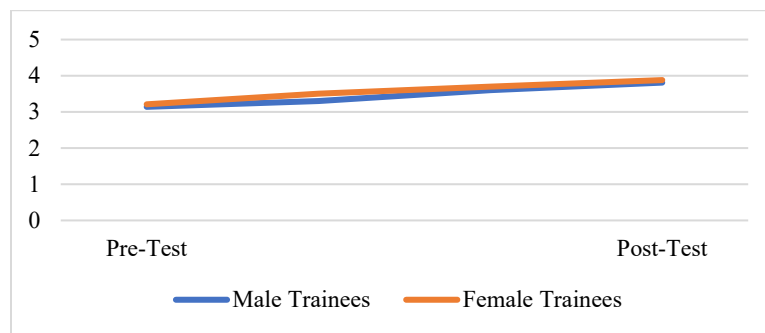
**Table 3.**  
*Pre- and post-training multimodal teaching performance scores*

Group	Pre-Test Mean (SD)	Post-Test Mean (SD)	t	p
Male Trainees	3.14 (.37)	3.81 (.34)	7.62	< .001
Female Trainees	3.21 (.35)	3.88 (.31)	8.04	< .001

Meanwhile, figure 4 below depicts changes in multimodal teaching performance for male and female trainees before and after the SEC-infused instructional intervention. The figure shows that both groups experienced improvement from pre-training to post-training, indicating overall instructional development. Although both trajectories reflect positive growth, the visual representation highlights differences in the magnitude of gains between groups. This figure complements the quantitative analyses by illustrating how improvements in teaching performance occurred across genders within the same instructional context.

**Figure 4.**

*Pre- and post-training multimodal teaching performance by gender*



### Qualitative Results: Thematic Analysis

Inductive thematic analysis of reflective journals and peer feedback revealed four dominant themes illustrating how SEC was enacted during multimodal instruction.

#### Theme 1: Emotion Regulation as a Buffer Against Multimodal Overload

Participants reported increased calmness and control when managing simultaneous digital, visual, and interpersonal demands.

#### Theme 2: Empathy-Driven Learner Engagement

Trainees described heightened sensitivity to learners' anxiety and participation levels, particularly in multimodal speaking tasks.

#### Theme 3: Gendered Patterns of SEC Expression

Female trainees emphasized relational harmony, inclusivity, and emotional attunement, while male trainees highlighted task focus, authority, and regulation during technological disruptions.

#### Theme 4: SEC as a Catalyst for Instructional Confidence

Participants across both groups reported reduced teaching anxiety and increased instructional confidence following SEC development.

These qualitative findings corroborated the quantitative results by illustrating the mechanisms through which SEC supported multimodal instructional practice.

## Discussion

The focus of this study was to evaluate the influence of Social-Emotional Competence (SEC) on Multimodal (MM) instruction within English Language Teacher Education (ELT) and to determine whether there is a gender difference in the results. Findings are based on the presented conceptual model in Figure 1 and demonstrate strong empirical evidence that supports the idea of SEC being a mediating variable between MM instruction's cognitive/emotional complexity and effective instructional outcomes. Rather than a fixed dispositional trait, SEC emerged as an area of professional competence that can be developed and enhanced through systematic and structured engagement with pedagogy.

As seen by the changes made from the pre-test values to post-test values in total, as well as within each of the three core components of SEC (emotional regulation; empathy; Interpersonal communication), these findings further substantiate recent research on Social and Emotional Learning (SEL) in teacher education, which has established that emotional and interpersonal skills can be developed through the context of 'real' instructional experiences (e.g., Jennings et al., 2019; Kim & Asbury, 2023). The large effect size of the data suggests that emotional regulation, empathy, and interpersonal communication skills are significantly influenced by engaging in pedagogical interventions within disciplinary practice as opposed to learning them in isolation (e.g., Durlak et al., 2022). The findings of this study contribute to the theory of multilingual learning (Mayer, 2020) by underscoring both the importance of teachers' emotional and relationship management as essential components of MM instructional success, which have not been adequately defined in the literature.

Consistent with the proposed model, there is a substantial amount of research supporting the findings that multimodal instructional requirements generally do not have a direct relationship with successful classroom practice, but rather, their effect on classroom performance is influenced by the teacher's social-emotional capacities (SEC). Teachers who had higher levels of SEC were perceived to have more success (i.e., teaching adaptively to a teaching disruption) than their classmates with lesser amounts of SEC, suggesting that SEC serves to enable multimodal instruction delivery through providing socio-culturally responsive conditions for preparation in a digitally dependent classroom environment (Darling-Hammond et al., 2020).

There should be an interpretive caution and nonessentialist understanding of the post-test SEC profile differences as they relate to gender (e.g., female trainees tended to have higher levels of interpersonal communication and empathy, while males tended to have relatively higher scores for emotional self-regulation and classroom management). These differences can be attributed to the processes of emotional development with regard to gender (Küçükakın, 2024; Zembylas, 2023), and as such, gender is the context for social-emotional competence rather than a determinant of ability to exercise social-emotional competence. Qualitative findings provided additional evidence that the SEC functioned dynamically during the delivery of instruction as a buffer against multimodal instructional overwhelm and a source of confidence during the delivery of instruction (Guo, 2023; Hargreaves & O'Connor, 2022).

The need for systematic incorporation of Social-Emotional Competencies (SEC), particularly in methodology courses for Education and Training (ET) practitioners who include technology in their instruction, is emphasized by the inclusion of these components in teacher education programs. Educators should explicitly build emotional regulation strategies, reflective practice, and interpersonal communication skills into lesson plans, micro-teaching, and assessment rather than treating them as an add-on, as this allows ET practitioners (trainees) to develop emotional intelligence and instructional competence in tandem, leading to more complete professional competence. Furthermore, these gender-related patterns show that by using reflective practice and non-stereotyping, ET practitioners (trainees)

will be encouraged to reflect critically upon the impact of social norms on the development of their instructional identities rather than perpetuating gender stereotypes.

The above-mentioned limitations provide directions for future research. Conducting this research using a larger, more diverse sample will provide an opportunity for improved statistical modeling using a more robust statistical analysis (i.e., testing mediation and moderation). The use of a longitudinal design will provide an opportunity to investigate how interpersonal skills develop and contribute to instructional effectiveness over an extended period of time. Future research may also involve examining additional contextual factors, including teaching experience, cultural background, and instructional setting, to better understand how SEC functions across various multimodal English language teaching (ELT) contexts.

As a whole, the studies demonstrate that SEC is a theory-based, practice-oriented, and institutionally supported dimension of professional competence. Incorporating SEC into the training of multimodal teachers provides a sustainable means for preparing ELT teachers who are not only technically skilled but also emotionally flexible, resilient, and sensitive to the complex realities of today's classrooms.

## **Conclusion**

The purpose of this research was to investigate the influence of social-emotional skills (SEC) while managing multimodal delivery of instruction within the context of teacher preparation programs for English Language Teachers (ELT), with a specific focus on the gender differences in expressing and measuring SEC. Using a quasi-experimental mixed-methods design, results demonstrated a relationship between improved emotional regulation, increased levels of empathy, improved skills in the area of interpersonal communication, and improved teacher performance on multimodal instruction, following participation in a multimodal instructional training module infused with socially-emotionally competent skills. This was demonstrated using the proposed theoretical model, which portrays SEC as a type of professional competence that develops through experience, and therefore can be used as a tool by educators to respond as effectively as possible to the cognitive and emotional demands of multimodal instruction.

The findings regarding gender-related differences were small, domain-specific, and demonstrated patterns consistent with the context of how competencies are practiced, and do not represent underlying or essentialized differences. These results support perspectives based on sociocultural theory whereby both the process of emotional socialization and professional expectations play a vital role in the way SEC is used in multimodal teaching environments.

Pedagogically, systematic incorporation of the establishment of social and emotional competence development into multimodal, technology-oriented teacher education is apparent from this study, rather than being seen as an adjunct to these systems of instruction. Emotion regulation techniques, reflective practices, and training on interpersonal communication can prepare future English language teachers to manage the emotional and instructional demands of contemporary classrooms more effectively.

In addition to these pedagogical implications, the findings of this study are limited by the sample size, single institution and location, and the use of micro-teaching practices as an evaluative technique rather than longer-term classroom experiences. These limitations highlight the need for further investigation through larger and more diverse samples, longitudinal research designs, and advanced analysis methods that will contribute to a deeper examination of the mediators and moderators of social-emotional competence development in multimodal instructional practices.

In summary, the findings of the current study support the increasing body of evidence that enhances the effectiveness of multimodal instructional approaches and relies not only upon technical competence; rather, it is based on the social-emotional competencies that teachers possess. By providing an effective framework for the incorporation of social and emotional competence development as part of the preparation of future English language teacher candidates, the opportunities for their provision of learning experiences that are more adaptable/resilient, and responsive to individual learner needs will increase.

## References

- CASEL (2013). *Casel guide: Effective social and emotional learning programs (Pre-school and elementary school edition)*.  
<http://static1.squarespace.com/static/513f79f9e4b05ce7b70e9673/t/526a220de4b00a92c90436ba/1382687245993/2013-casel-guide.pdf>
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2020). Implications for educational practice of the science of learning and development. *Applied Developmental Science, 24*, 97–140. <https://doi.org/10.1080/10888691.2018.1537791>
- Durlak, J. A., Mahoney, J. L., & Boyle, A. E. (2022). What we know, and what we need to find out about universal, school-based social and emotional learning programs for children and adolescents: A review of meta-analyses and directions for future research. *Psychological Bulletin, 148*, 765-782. <https://doi.org/10.1037/bul0000383>
- Durlak, J. A., Domitrovich, C. E., Weissberg, R. P., & Gullotta, T. P. (2024). *Handbook of social and emotional learning* (2<sup>nd</sup> ed.). Guilford Press.
- Guo X. (2023). Multimodality in language education: Implications of a multimodal affective perspective in foreign language teaching. *Frontiers in Psychology, 9*, 14. [https://doi: 10.3389/fpsyg.2023.1283625](https://doi.org/10.3389/fpsyg.2023.1283625).
- Hargreaves, A., & O'Connor, M. T. (2018). *Collaborative professionalism: Teaching together means learning for all*. SAGE Company.
- 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*, 491-525. <http://dx.doi.org/10.3102/0034654308325693>
- 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.2021.03.001>
- Keshishi, N., & Hack, S. (2023). Emotional intelligence in the digital age: Harnessing AI for students' inner development. *Journal of Perspectives in Applied Academic Practice, 11*(3), 172-175.
- Kim, L. E., & Asbury, K. (2020). Like a rug had been pulled from under you: The impact of COVID-19 on teachers in England during the first six weeks of the UK lockdown. *British Journal of Educational Psychology, 90*, 1062-1083. <https://doi.org/10.1111/bjep.12381>
- Küçükakın, P. M. (2024). Promoting gender equity through teacher education: A comparison of Turkish and American preservice teachers' perspectives. *Kastamonu Education Journal, 32*(3), 484-497. doi: 10.24106/kefdergi.1525386
- Lotherington, Heather. (2011). Teaching multimodal and digital literacy in L2 settings: New literacies, new basics, new pedagogies. *Annual Review of Applied Linguistics, 31*, 226 - 246. <https://doi.org/10.1017/S0267190511000110>.
- Lozano-Peña, G., Sáez-Delgado, F., López-Angulo, Y., & Mella-Norambuena, J. (2021). Teachers' social-emotional competence: History, concept, models, instruments, and recommendations for educational quality. *Sustainability, 13*, 1-26. <https://doi.org/10.3390/su132112142>
- Manowaluilou, N., Thanarachathaphoom, T., Pimthong, P., Ugsornkid, S., & Ketkosan, N. (2024). Digital literacy and fluency in education: Enhancing teacher education preparedness policy. *Journal of Infrastructure, Policy and Development, 8*(8), 4415. <https://doi.org/10.24294/jipd.v8i8.4415>
- Mayer, R. E. (2020). *Multimedia learning* (3<sup>rd</sup> ed.). Cambridge University Press.
- Pham, Sy. (2024). The influence of social and emotional learning on academic performance, emotional well-being, and implementation strategies: A literature review. *Saudi Journal of Humanities and Social Sciences, 9*(12), 381-391. <https://doi.org/10.36348/sjhss.2024.v09i12.001>.
- Schonert-Reichl, K. A., Hanson-Peterson, J. L., & Hymel, S. (2024). SEL and preservice teacher education. In J. A. Durlak et al. (Eds.), *Handbook of social and emotional learning* (2<sup>nd</sup> ed., pp. 406-421). Guilford Press.

- Slovak, P., & Fitzpatrick, G. (2015). Teaching and developing social and emotional skills with technology. *ACM Transactions on Computer-Human Interaction*. <https://doi.org/10.1145/2744195>.
- Vidosavljevic, M. (2022). Multimodal and digital literacy as new concepts in education. *Zbornik radova Filozofskog fakulteta u Pristini*, 52, 129-144. <https://doi.org/10.5937/zrffp52-37477>.
- Zembylas, M. (2003). Emotions and teacher identity: A poststructural perspective. *Teachers and Teaching*, 9, 213-238. <https://doi.org/10.1080/13540600309378>