

Research on Pre-Service Primary School Teachers' Social and Emotional Competence: Current Status, Challenges, and Development Pathways

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Abstract: Based on the study of 136 pre-service primary school teachers from a university in Western China, this paper investigates their social and emotional competence (SEC) within the five CASEL domains: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Results indicate a moderately high self-perceived level of overall SEC (Mean = 3.79), with no significant differences across domains. Factors such as participation in educational volunteer activities and possession of a high school teaching certificate were positively associated with higher SEC, whereas standard training components like teaching practicum showed no significant impact. Additionally, second-year students reported lower SEC scores, suggesting a potential "praxis shock" phase. The study highlights a lack of deep conceptual understanding of social-emotional learning among participants and emphasizes the need for intentional integration of structured SEL training, reflective practices, and policy support within teacher education programs in China to enhance both teacher well-being and classroom effectiveness.

Keywords: Pre-service Teachers; Social-emotional Competence; Teacher Education; SEL; China.

1. Introduction

The quality of education is profoundly influenced by the professional and personal competencies of teachers. While traditional teacher education has predominantly emphasized the mastery of subject-specific knowledge and pedagogical skills, a growing body of international research underscores the critical importance of teachers' social and emotional competence (SEC) for effective teaching and student development [1,2]. SEC encompassing the abilities to understand and manage emotions, set positive goals, feel and show empathy for others, establish and maintain supportive relationships, and make responsible decisions, is increasingly recognized as a cornerstone of effective educational practice [3]. Teachers with well-developed SEC are better equipped to create positive classroom climates, build strong teacher-student relationships, implement effective classroom management strategies, and buffer against occupational stress and burnout [4, 5]. Consequently, the cultivation of SEC is no longer viewed as a peripheral aspect of teacher preparation but as a central component of developing holistic educator proficiency [6].

Globally, many advanced education systems have begun to systematically integrate Social and Emotional Learning (SEL) into both pre-service teacher training and in-service professional development. Countries like the United States, the United Kingdom, and Australia have developed frameworks and standards that explicitly include SEC as a core expectation for educators [7, 8]. This shift is predicated on evidence that teachers' SEC directly impacts their well-being and instructional quality, which in turn, significantly affects students' academic achievement, social-emotional development, and mental health [9, 10]. In stark contrast, the landscape of teacher education in China has historically been characterized by a strong emphasis on standardized testing, knowledge transmission, and technical skills, often at the

expense of nurturing the socio-emotional dimensions of teaching [11, 12]. Although the Chinese Ministry of Education introduced professional standards for teachers in 2012, which implicitly acknowledge holistic development, the practical implementation within teacher preparation programs remains heavily skewed toward cognitive and pedagogical domains [13]. This creates a significant gap where pre-service teachers, who are already under immense pressure from academic demands and future employment anxieties, may enter the profession inadequately prepared for the intense emotional and relational demands of classroom life [14, 15].

The necessity of this research is thus twofold. First, despite the global recognition of SEC's importance, there is a conspicuous lack of empirical investigation into the specific SEC profiles of pre-service teachers (defined as students enrolled in teacher training programs prior to full certification) within the Chinese context. Understanding their current SEC baseline is the first essential step toward targeted intervention [16]. Second, the factors that facilitate or hinder the development of SEC among Chinese pre-service teachers are poorly understood. Existing international literature suggests that factors such as practical teaching experiences (e.g., practicum, volunteering), participation in reflective and collaborative activities, personal dispositions, and the overall culture of the teacher education institution play crucial roles [17, 18]. However, it is unclear how these factors operate within the unique cultural and structural constraints of China's higher education system. Without this understanding, teacher educators and policymakers lack the evidence base needed to redesign curricula and create supportive environments that foster these essential competencies.

The core concept underpinning this study is SEC, operationalized through the five interrelated domains established by the Collaborative for Academic, Social, and Emotional Learning: self-awareness, self-management, social

awareness, relationship skills, and responsible decision-making. For pre-service teachers, proficiency in these domains is not merely beneficial but fundamental to their future professional success and personal well-being. It enables them to navigate the complexities of classroom interactions, respond adaptively to students' diverse needs, and sustain their passion and commitment in the face of challenges [19]

To address the identified gaps, this study aims to answer the following research questions:

RQ1: What is the current level of social and emotional competence, across its five core domains, among pre-service primary school teachers in China?

RQ2: What individual, educational, and experiential factors influence their SEC development?

RQ3: Based on the findings, how can teacher education programs in China be enhanced to better support the systematic development of SEC among pre-service teachers?

By answering these questions, this study seeks to contribute valuable insights to the burgeoning field of SEC research in teacher education, particularly within the understudied Chinese context, and to provide evidence-based recommendations for cultivating a more emotionally resilient and relationally skilled teaching force.

2. Literature Review: Theoretical Frameworks of Sec

The conceptualization and measurement of teachers' SEC are predominantly anchored in the foundational framework developed by the Collaborative for Academic, Social, and Emotional Learning (CASEL). CASEL's model delineates five core, interrelated competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making [20, 21]. This framework provides a comprehensive lens for understanding the individual capacities required for educators to effectively navigate the social and emotional demands of teaching, foster positive learning environments, and facilitate students' own SEL [22]. While CASEL offers a broad taxonomy, several derivative models have been proposed to specify the mechanisms through which teacher SEC translates into effective educational practice. Chief among these is the Prosocial Classroom Model [23], which posits a dynamic relationship between teachers' SEC and classroom outcomes. This model hypothesizes that teachers with high SEC are more likely to develop supportive teacher-student relationships and effective classroom management strategies, which create a well-regulated, low-conflict classroom environment. This positive environment, in turn, enhances student engagement and learning while simultaneously protecting the teacher from burnout, thereby creating a virtuous cycle of prosocial classroom interactions.

Complementing this, the Social, Emotional, and Cultural Anchor Framework emphasizes that SEC cannot be divorced from cultural context [24]. It argues that effective and responsive teaching requires educators to possess cultural competence—the ability to understand, communicate with, and effectively interact with students across cultures—as an integral component of social awareness and relationship skills. This framework is particularly salient in diverse educational settings, asserting that SEC involves recognizing and honoring the cultural assets students bring to the classroom

[25]. More recently, the Teacher Thriving Framework has emerged, focusing on the role of SEC in sustaining teacher well-being and professional engagement [26]. This model suggests that competencies like self-management and self-awareness are critical not only for effective teaching but also for personal resource management, resilience, and long-term career persistence, positioning SEC as a fundamental asset for teacher thriving rather than merely a set of teaching skills.

The theoretical underpinnings of SEC are further enriched by constructs from psychological research, most notably emotional intelligence (EI). EI defined as the ability to perceive, use, understand, and manage emotions [27], provides a granular psychological basis for the broader competencies outlined by CASEL. Research consistently links higher teacher EI to greater classroom effectiveness, better student-teacher relationships, and lower levels of teacher stress [28, 29]. Furthermore, the practices of mindfulness—paying attention to the present moment non-judgmentally—and self-compassion—extending kindness and understanding to oneself in instances of failure or pain—are increasingly recognized as foundational to SEC development [30]. Mindfulness practices enhance self-awareness and self-management by allowing teachers to respond to classroom stressors with greater calm and clarity rather than reactive impulsivity [31]. Similarly, self-compassion serves as a key emotional regulation strategy, buffering against the perfectionism and self-criticism that can lead to burnout and fostering the emotional resilience necessary to sustain caring and supportive relationships with students [32]. Thus, the integration of these psychological constructs into models of teacher SEC provides a more robust theoretical explanation for how these competencies are developed and maintained, highlighting that SEC involves not only skills but also cultivated dispositions and practices that support overall well-being.

3. Methodology

3.1. Selection of Research Paradigm

This study adopted a quantitative research paradigm to investigate the current state of social-emotional competence among pre-service primary school teachers in China. Quantitative methods were deemed appropriate for this research as they allow for the systematic collection of numerical data from a large sample, enabling statistical analysis and generalizable conclusions [33]. Given the study's aim to measure and compare levels of SEC across different demographic and experiential variables, a quantitative approach provided the necessary rigor and objectivity to identify patterns, differences, and potential predictors of social-emotional capabilities [34].

3.2. Participants

The participants consisted of 136 pre-service teachers enrolled in teacher education programs at E College (pseudonym), a university in western China. The sample was selected through convenience sampling, a common method in educational research when random sampling is not feasible [35]. Participants were from various years of study (first to fourth year) and specialized in primary education, physical education, Chinese language and literature, mathematics, and English. The gender distribution was uneven, with 79.41% female and 20.59% male respondents, reflecting the gender imbalance typical in teacher education cohorts in China. All

participants were informed of the study's purpose and provided voluntary consent.

3.3. Data Collection Methods

Data collection was carried out using a self-designed online questionnaire administered via Wenjuanxing (Questionnaire Star), a widely used platform in Chinese academic research. The questionnaire was distributed through WeChat over a two-week period to ensure sufficient time for responses. The instrument included sections on demographic information, participation in educational activities, understanding of SEL, and a 16-item self-assessment scale measuring five core dimensions of SEC: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. The scale items were adapted from established SEL frameworks and used a 5-point Likert scale. To ensure content validity, the questionnaire was reviewed by two experts in teacher education and piloted with a small group of pre-service teachers.

3.4. Data Analysis Methods

Data analysis was performed using SPSSAU, an online statistical analysis tool that produces results consistent with SPSS but with a more user-friendly interface. Descriptive statistics (frequencies, means, standard deviations) were used to summarize demographic characteristics and overall SEC levels. Reliability was assessed using Cronbach's alpha, which yielded a high value of 0.881, indicating excellent internal consistency. Validity was examined through KMO and Bartlett's tests, confirming the suitability of the data for factor analysis (KMO = 0.865). Inferential statistics included independent samples t-tests and one-way ANOVA to compare SEC scores across groups (e.g., gender, grade, certification status), and chi-square tests to examine relationships between categorical variables (e.g., participation in activities and understanding of SEL). These methods allowed for a comprehensive exploration of factors influencing SEC levels among pre-service teachers.

3.5. Research Ethics

Ethical considerations were strictly adhered to throughout the study. Participants were informed of their right to withdraw at any time, and anonymity was guaranteed to encourage honest responses [36]. The study did not involve vulnerable populations, and all data were collected and stored securely. Ethical approval was obtained from the institutional review board of the authors' affiliated university. The research adhered to the principles of integrity, confidentiality, and respect for participants' autonomy, in line with international standards for educational research [37].

4. Findings

4.1. Descriptive Statistics

The descriptive statistics provide a comprehensive overview of the demographic and experiential characteristics of the pre-service primary school teachers who participated in this study. The sample consisted of 136 participants, the majority of whom were female (79.41%), reflecting the gender imbalance often observed in the teaching profession, particularly at the primary level. The age distribution was predominantly clustered between 19 and 21 years old, with 20-year-olds constituting the largest group (42.54%). This is consistent with the typical age range of university students

enrolled in teacher education programs. In terms of academic year, an overwhelming majority were second-year students (75.74%), followed by first-year students (20.59%), with only a small fraction in their third (2.94%) or fourth year (0.74%). This skew towards earlier academic years suggests that the participants were predominantly in the initial phases of their professional preparation, a crucial time for foundational skill development. Regarding their field of study, a significant majority were specializing in Primary Education (83.82%), with smaller representations from English (10.29%), Physical Education (3.68%), Chinese Language and Literature (1.47%), and Mathematics and Applied Mathematics (0.74%). This concentration aligns with the study's focus on pre-service primary school teachers.

A key aspect of the participants' background was their family influence in the teaching profession. Only 30.88% reported having a parent or sibling who was a teacher, indicating that for most participants, the choice to enter teaching was not significantly influenced by immediate family role models. The certification status of the participants revealed that the vast majority (81.62%) had not yet obtained any teaching qualification. Among those who had, the Primary School Teaching Certificate was the most common (17.65%), while certificates for kindergarten (0.74%), Junior Middle School (2.94%), and Senior Middle School (1.47%) were held by very few. This is expected, as the participants were still in training, and obtaining certification often occurs towards the end or after completion of their degree programs.

The investigation into participation in various educational activities yielded insightful data. A high proportion (68.38%) had engaged in teaching trainee or pre-service education, indicating strong institutional support for practical experience. However, involvement in educational research or practical projects was considerably lower (30.88%), suggesting a potential gap between practical teaching experience and engagement with educational research. Participation in campus cultural activities or event organization was evenly split (50% each). A notably small percentage (18.38%) had received awards in teaching skills competitions, which might indicate either limited participation in such competitions or a highly competitive environment. Just over half of the participants (55.15%) had taken part in educational volunteer activities, highlighting a substantial engagement with community service. Conversely, only 35.29% had pursued additional training courses related to education or psychology, pointing to a area for encouraging further professional development. Furthermore, only a quarter of the respondents (25%) had any form of teaching experience, such as private tutoring or participation in volunteer teaching programs in rural areas, suggesting that formal practicum constitutes the primary source of teaching experience for most. Finally, and crucially, 75% of the pre-service teachers expressed an intention to pursue a career as primary school teachers after graduation, indicating a generally strong commitment to the profession among the sample, though a significant minority (25%) were either uncertain or did not plan to enter the field, which warrants further investigation into their motivations and career aspirations.

4.2. Level of SEC

The assessment of SEC among the pre-service teachers revealed an overall moderately high level of self-perceived proficiency, with a mean total score of 3.79 (SD = 0.703) on a 5-point scale. This suggests that, on average, the participants

felt reasonably confident in their SEC abilities, though there is considerable room for improvement towards mastery. The analysis across the five core domains of SEL provides a more nuanced understanding of their strengths and potential areas for development.

The domain of Self-Awareness recorded the highest mean score (3.819, SD = 0.783). This indicates that participants generally felt capable of recognizing and understanding their own emotions, values, and strengths. This foundational skill is crucial for teachers, as self-aware educators are better equipped to manage their reactions in the classroom and serve as emotional role models for their students. The domain of Self-Management followed closely (3.777, SD = 0.764), suggesting that participants believed they could reasonably well regulate their emotions, manage stress, and control impulses. This ability is essential for maintaining a calm and productive classroom environment, especially under pressure. The scores for Social Awareness (3.779, SD = 0.746) and Relationship Skills (3.783, SD = 0.702) were identical on average. This reflects a perceived ability to empathize with others, understand social cues, and establish maintain healthy, cooperative relationships with students, colleagues, and parents—a critical component for building a supportive learning community. The domain of Responsible Decision-Making had a marginally higher mean (3.794, SD = 0.713)

but can be considered on par with the others. This skill involves making ethical, constructive choices about personal and social behavior, which is vital for navigating complex classroom situations.

Notably, all domains showed negative skewness (ranging from -0.811 to -0.602) and positive kurtosis (ranging from 1.832 to 2.335), indicating that the distribution of scores was clustered towards the higher end of the scale (left-skewed) and had a peaked distribution (leptokurtic), meaning a greater number of respondents rated themselves towards the "agree" and "strongly agree" end of the spectrum than would be expected in a normal distribution. The Coefficient of Variation (CV%) for all domains was below 21%, indicating relatively consistent responses within the group. While the overall picture is positive, the mean scores hovering below 4.0 suggest that few participants felt very strong across all competencies. The high internal consistency of the scale (Cronbach's $\alpha = 0.881$) confirms the reliability of these measurements. This collective self-assessment points to a cohort that is entering the profession with a solid, though not yet expert, foundation in social-emotional competencies, underscoring the importance of targeted SEL integration within teacher education curricula to elevate these skills from moderate to high proficiency.

Table 1. Descriptive Statistics for Social-Emotional Competence Domains

Variable	Mean \pm Standard Deviation (SD)	Median	Standard Error (SE)	95% Confidence Interval for the Mean (Lower Limit)	95% Confidence Interval for the Mean (Upper Limit)	Kurtosis	Skewness	Coefficient of Variation (CV)
Self-Awareness	3.819 \pm 0.783	4	0.067	3.687	3.95	2.054	-0.809	20.52%
Self-Management	3.777 \pm 0.764	4	0.066	3.648	3.905	2.289	-0.811	20.24%
Social Awareness	3.779 \pm 0.746	4	0.064	3.654	3.905	1.832	-0.630	19.74%
Relationship Skills	3.783 \pm 0.702	4	0.060	3.665	3.901	2.335	-0.666	18.55%
Responsible Decision-Making	3.794 \pm 0.713	4	0.061	3.674	3.914	2.135	-0.602	18.80%
Overall SEC	3.790 \pm 0.703	3.933	0.060	3.672	3.909	2.693	-0.784	18.55%

4.3. Factors Influencing Social-Emotional Competence

The investigation into factors influencing the social-emotional competence (SEC) of pre-service teachers employed t-tests and ANOVA to examine differences across various demographic and experiential groupings. The analysis revealed that several factors were statistically significant, while others showed no discernible impact on the self-reported SEC levels.

A highly significant finding was that holding a High School Teaching Certificate was associated with markedly higher scores across all SEC domains ($p < 0.05$ for all domains). The eight individuals who held this certificate reported higher scores in every area, significantly outperforming their peers who did not hold this certification. While the sample size for this group is small, this result suggests that the additional training and assessment required for a high school certificate, or the self-selection of highly competent individuals to pursue

it, may be linked to superior SEC. Participation in educational volunteer activities also emerged as a positive influencing factor. Those who had participated in such activities (55.15% of the sample) demonstrated significantly higher scores in Self-Management ($p=0.034$) and Social Awareness ($p=0.033$) compared to those who had not. This implies that practical, altruistic engagement in educational settings provides valuable real-world experience in regulating one's own emotions and understanding the needs of others, thereby enhancing these specific competencies.

The academic year of the participants was another significant factor. ANOVA results indicated statistically significant differences for Self-Awareness ($p=0.002$), Self-Management ($p=0.003$), Social Awareness ($p=0.017$), and the overall SEC score ($p=0.022$). Post-hoc analyses, though constrained by the small sample sizes in Years 3 and 4, suggested that first-year students often reported higher scores than second-year students. This could be attributed to the "beginner's optimism" of first-year students, whose self-perceptions may not yet have been tempered by the practical

challenges and increased self-critical awareness that often develop during the more intensive practicum and coursework typically experienced in the second year. This dip in perceived competence in the second year, followed by a potential recovery in later years, aligns with models of professional identity development that involve a period of disillusionment before integration.

Conversely, a number of factors were found to have no significant impact on SEC scores. This included gender, family background in teaching, holding other types of teaching certificates (kindergarten, primary, junior middle school), participation in teaching practicum, involvement in research projects, winning teaching awards, taking additional psychology/education courses, having other teaching experiences (e.g., tutoring), and career intention to become a teacher. The lack of significance for these variables is itself an important finding. It suggests that SEC is not automatically developed through standard teacher training components like practicum or isolated coursework. Rather, its development may be more nuanced, relying on specific types of reflective practice (like volunteering) or higher-level certification processes, and may be a more stable individual trait that is not heavily influenced by these common background variables.

4.4. Awareness and Practices Regarding Social-Emotional Learning

This section delves into the pre-service teachers' understanding of SEL concepts and their self-reported behavioral tendencies in managing emotions, resolving conflicts, and collaborating with others. The data reveal a population with emerging but not yet mature SEL awareness and practices, highlighting a critical area for intervention within teacher education programs.

When asked about their familiarity with the concept of SEL, only a small minority demonstrated solid understanding: 2.94% reported "complete understanding" and 47.06% reported "comparative understanding." A large plurality (44.85%) had "heard of it but did not know much," and 5.15% were completely unfamiliar. This indicates that while the term might be circulating within their educational environment, deep, conceptual knowledge is lacking for nearly half of the participants. Cross-tabulation analysis revealed that understanding was significantly higher among those who held teaching certificates, participated in practicum, engaged in research projects, and joined volunteer activities. This suggests that practical engagement and formal accreditation processes may expose students more directly to SEL concepts.

Regarding emotion regulation strategies, the most common response was engaging in passive activities like "listening to music, reading, or other entertainment" (40.44%), followed by "talking to friends or family" (32.35%). Only 11.76% opted for physical activity, and 11.03% used work or study as a distraction. A small but concerning 4.41% reported uncertainty about how to regulate their emotions. Gender differences were notable, with males more likely to use physical activity (28.57% vs. 7.41% of females) and females preferring to talk about feelings (35.19% vs. 21.43%) or use entertainment (43.52% vs. 28.57%). In terms of expressing low moods, the most common strategy was "directly talking to others" (41.18%), indicating a healthy approach to seeking support. However, a significant portion used indirect methods like writing or art (19.12%), internalized their feelings by "self-comforting to avoid affecting others" (22.79%), or remained silent (14.71%). Those with teaching experience

were more likely to choose direct expression.

The participants' self-assessment of their ability to understand others' emotions was realistic: 66.18% believed they could understand most of the time but occasionally misinterpret, while 27.94% felt they could easily understand. Very few reported significant difficulties (2.94% found it hard, 1.47% rarely considered others' emotions). In conflict resolution, the majority preferred constructive approaches, with 61.76% opting to "actively seek dialogue and solve the problem," and 26.47% choosing to "avoid conflict and seek compromise." Only a small fraction preferred less constructive methods like insisting on their own view (5.88%) or avoiding the issue (1.47%). Teamwork was largely viewed positively, with 52.94% seeing it as a "good opportunity for learning and growth," and 29.41% being accepting though preferring independent work. Only 5.15% reported discomfort with teamwork.

Finally, when asked about their plans for improving their SEC, the most popular choice was "through practice and reflection" (37.50%), which is a promising, metacognitive approach. This was followed by "through reading and self-study" (28.68%) and "participating in professional training or workshops" (20.59%). A small number sought mentorship (5.88%), and 7.35% had no concrete plan. This distribution indicates a preference for self-directed and experiential learning over formalized training, providing a clear direction for how SEL support could be packaged and delivered within teacher education programs.

5. Conclusion and Discussion

This study provides a comprehensive examination of the SEC of pre-service primary school teachers in China, its influencing factors, and the participants' awareness of related concepts. The findings reveal a cohort with a moderately high self-assessment of their SEC across all five CASEL domains (Self-Awareness, Self-Management, Social Awareness, Relationship Skills, and Responsible Decision-Making), with mean scores clustering around 3.79 on a 5-point scale. This indicates a solid foundational level of competency upon which to build, yet it also underscores a significant opportunity for growth towards the mastery required for the emotionally demanding profession of teaching [38]. The uneven development, where no single domain stood out as a clear strength or weakness, suggests a generalized rather than specialized development of these skills within the current teacher education framework.

The analysis of influencing factors yields critical insights for teacher education programs. The significant positive correlation between participation in educational volunteer activities and higher scores in Self-Management and Social Awareness aligns with experiential learning theory, demonstrating that practical, altruistic engagement provides a authentic context for practicing emotion regulation and perspective-taking [39]. The strikingly higher SEC scores associated with holding a High School Teaching Certificate, albeit from a tiny subsample, hint that the more rigorous subject matter knowledge and pedagogical training required for this level may also foster, or selectively attract individuals with, greater socio-emotional sophistication. Conversely, the lack of significant impact from standard program components like the teaching practicum or foundational coursework is a crucial finding. It implies that SEC development is not an automatic byproduct of traditional teacher training; it must be intentionally and strategically integrated [40]. The dip in self-

assessed SEC among second-year students may reflect a period of "praxis shock," where theoretical knowledge confronts complex classroom realities, leading to a more critical self-appraisal [41]

Theoretically, these findings strongly support the call to integrate structured SEL frameworks into the core of teacher education, moving beyond ad-hoc or peripheral treatment [42]. The results affirm the universality of the CASEL framework while simultaneously highlighting the necessity for its culturally and contextually adaptive implementation within the Chinese educational landscape [43]. The study bridges the gap between theoretical models of teacher SEC and empirical evidence from a pre-service context, confirming that the competencies which predict in-service teacher effectiveness and well-being [44] are already nascent and malleable during the formative pre-service period.

Practically, the results dictate a multi-faceted approach to enhancement. Firstly, emotional intelligence training explicitly targeting self-regulation and empathy should be embedded into the curriculum, utilizing methods like the RULER approach to make emotional skills tangible and teachable [45]. Secondly, mindfulness-based interventions (MBIs) should be introduced to equip pre-service teachers with evidence-based techniques for stress reduction, attention regulation, and fostering a non-judgmental awareness of self and others, thereby mitigating burnout and enhancing classroom climate [46, 47]. Thirdly, the practicum and volunteer experiences must be transformed through structured reflective practice. Guided mentorship should help students process the emotional challenges of teaching, moving beyond mere technical skill acquisition to deep, metacognitive learning that strengthens their SEC [48]. Finally, this requires top-down policy support. Educational authorities must mandate the inclusion of SEC standards within teacher certification requirements and provide the necessary resources for teacher education institutions to develop and implement effective, evidence-based SEL programs for their students [49]. By fostering socially and emotionally competent beginning teachers, we not only enhance their personal well-being and career sustainability but also empower them to cultivate the very same essential life skills in their future students, creating a positive ripple effect throughout the education system.

6. Limitations and Future Research

This study is subject to several limitations that warrant acknowledgment. Firstly, the sample was drawn from a single university, which constrains the generalizability of the findings to the broader population of pre-service teachers across diverse geographical and institutional contexts in China. Secondly, the reliance on self-report measures for assessing social-emotional competence introduces the potential for social desirability bias and common method variance, where participants may overestimate their abilities. Finally, the cross-sectional design precludes any causal inference regarding the developmental trajectories of SEC or the definitive impact of specific experiences.

Future research should address these limitations and expand upon these findings. Longitudinal studies are essential to track the evolution of SEC throughout the entire teacher education program and into the early teaching years, identifying critical inflection points for intervention. Employing in-depth qualitative approaches, such as interviews and reflective journals, would provide rich,

nanced data on the lived experiences and internal processes that shape SEC development. Furthermore, rigorously designed intervention studies are needed to empirically test the efficacy of specific SEL training programs, mindfulness-based practices, and reflective mentoring models integrated into teacher education curricula. Finally, cross-cultural comparative research is recommended to delineate universal elements of SEC from those that are uniquely shaped by specific cultural and educational contexts, thereby contributing to a more global and adaptable understanding of teacher social-emotional competence.

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