

DEVELOPMENT AND VALIDATION OF A QUESTIONNAIRE USED TO EVALUATE
CHINESE PRESCHOOL TEACHERS' PERSPECTIVES ABOUT SOCIAL,
EMOTIONAL, AND BEHAVIORAL TEACHING PRACTICES

By

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To my parents, Mr. Ronghua Luo and Mrs. Meixiu Wei,
who have given their best to me and my sister,
for teaching me and engraving these words on my heart: "The very beginning mind itself
is the most accomplished mind of true enlightenment."

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LIST OF ABBREVIATIONS

CFA	Confirmatory factor analysis
China's ELDG	China's Early Learning and Development Guidelines for Children 3-6 Years Old
China's <i>Guidance</i>	China's Guidance for Preschool Education – Trial Version
China's <i>Outline</i>	Outline of China's National Plan for Medium and Long-Term Education Reform and Development (2010-2020)
ECE	Early childhood education
ECSRDS	Explanatory case study research designs
GERDs	Group experimental research designs
MOE	Ministry of Education of the People's Republic of China
MOH	Ministry of Health of the People's Republic of China
PRC	People's Republic of China
SCERDs	Single-case experimental research designs
SETP-C	Social-Emotional Teaching Practices Questionnaire – China (Snyder & Luo, 2017)
TBE	Teaching behavior expectations
TEE	Teaching children to express emotions
TFR	Teaching friendship skills
TIA	Teaching social interaction with adults
TIP	Teaching social interaction with peers
TPOT	Teaching Pyramid Observation Tool for Preschool Classrooms (Hemmeter, Fox, & Snyder, 2014)
TPOT-P	Teaching Pyramid Observation Tool for Preschool Classrooms – Pre-publication version (Fox, Hemmeter, & Snyder, 2008)
TPS	Teaching social problem solving

TSA	Teaching social adjustment
TSC	Teaching social cooperation
TSI	Teaching social independence
TSR	Teaching social responsibility
TRE	Teaching children to regulate emotions
TUE	Teaching children to understand emotions

LIST OF DEFINITIONS

Challenging behavior	Challenging behavior refers to any repeated pattern of behavior by a child that interferes with successful operation of classroom activities or behavior deemed to be harmful to self or others (Dong, 2013).
Early childhood education	In mainland China, early childhood education refers to care and education for children from birth to age 6 and before they enter grade 1.
Emotional competence	Emotional competence is defined as child behaviors or responses related to emotional expression, understanding emotions of self and others, and emotion regulation (Denham & Burton, 2003).
Preschool	In mainland China, preschool has a different name, “you er yuan” (幼儿园), which literally means “kindergarten” in Chinese/Mandarin, usually referring to full-day education and care programs serving children ages 3 to 6.
Preschool teacher	Preschool teacher is a type of early childhood educator who is responsible for the direct care, supervision, guidance, and education of children in preschool classroom settings.
Preschool social education	Preschool social education is a translated term of “幼儿园社会教育” or “幼儿园社会领域教育”. Preschool social education refers to all activities in preschools that aim to promote the social development and learning of preschool children. The objectives and content of preschool social education in mainland China focuses on cognitive, affective, and behavioral components of social development and learning of preschool children. The cognitive component refers to the ability to acquire and apply knowledge about self, others, the social environment, social activities, social norms, and the social culture. The affective component includes the development of attachment, self-esteem, empathy, feelings of shame, moral responsibility, knowing right and wrong, and knowing what is liked/disliked through interacting with the environment. The behavior component focuses on social interaction and prosocial behavior such as sharing, cooperation, and helping (Liu, 2008).
Social competence	Social competence is defined as the socially acceptable learned behaviors that permit a child to develop and engage in interactions with peers and adults (Gresham & Elliott, 1990).

Social-emotional instruction	Social-emotional instruction is defined as intentional and systematic teaching specifically designed to provide learning experiences or opportunities for preschool children to develop their social-emotional competence (Liu & Feng, 2005).
Social, emotional, and behavioral teaching practices	Social, emotional, and behavioral teaching practices are defined as specific actions or behaviors of preschool teachers that involve manipulating the physical, temporal, interactional, or instructional environment to foster young children's social, emotional, and behavioral skills or competencies (Snyder, Hemmeter, & Fox, 2015). In the present study, these teaching practices are those associated with the <i>Pyramid Model</i> (Fox, Carta, Strain, Dunlap, & Hemmeter, 2010; Hemmeter, Fox, & Snyder, 2014), and China's <i>Guidance</i> and ELDG documents for promoting young children's social-emotional competence and preventing or addressing their challenging behavior.
Teaching practices	Specific actions or behaviors of teachers in preschool classrooms used during social and instructional interactions with children (Snyder, Hemmeter, & Fox, 2015).

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DEVELOPMENT AND VALIDATION OF A QUESTIONNAIRE USED TO EVALUATE
CHINESE PRESCHOOL TEACHERS' PERSPECTIVES ABOUT SOCIAL,
EMOTIONAL, AND BEHAVIORAL TEACHING PRACTICES

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Preschool social education has become an increasingly important area of research and practice in mainland China with the social domain being recognized as an independent preschool curricular domain since 2001. Little is known, however, about the specific teaching practices that Chinese preschool teachers are using to promote children's social-emotional competence and to prevent or address challenging behavior. The purposes of the present study were to develop and validate a questionnaire focused on social, emotional, and behavioral teaching practices and to use the questionnaire to examine Chinese preschool teachers' self-reported use of and confidence about implementing the practices. The questionnaire was titled the Social-Emotional Teaching Practices Questionnaire – China (SETP-C; Snyder & Luo, 2017).

Before primary data collection for the present study occurred, the SETP-C was developed and various sources of validity evidence were gathered using systematic and iterative quantitative and qualitative approaches. The development and validation of the

SETP-C consisted of four phases: item generation and selection, initial validation and item reduction, external expert review, and wording and translation.

A non-experimental, descriptive survey research design was used to gather SETP-C data from a sample of 1,599 Chinese teachers from 120 preschools in Beijing and Ningbo. Using these data, four confirmatory factor analytic models were tested and compared to provide score validity evidence focused on internal structure. A seven-factor solution was chosen due to its conceptual and statistical soundness. Internal consistency score reliability evidence was also promising and showed high degree of internal consistency for subscale scores.

Findings showed Chinese preschool teachers reported they were implementing many social-emotional teaching practices, but were less likely to implement and less confident about practices that address the needs of children with persistent challenging behavior. Teacher's role, experience, a social-emotional curriculum, child-to-teacher ratio, inclusion of children with disabilities, and child age were significantly associated with teachers' reported use and confidence with implementing social, emotional, and behavioral teaching practices.

Teachers identified two primary requests in terms of supports for implementing practices: a specific social-emotional curriculum and family support and cooperation. Limitations and implications of the present study along with considerations for future research are discussed.

CHAPTER 1 INTRODUCTION

The past three decades have witnessed an explosion of interest in preschool social education (幼儿园社会教育 or 幼儿园社会领域教育) in mainland China. Since the mid-1980s, the focus in early childhood development and education has been on comprehensive domains of child development, compared with the previous emphasis targeting cognitive development and intellectual education (智育) (Dong & Xia, 1991). A growing body of research has shown the importance of children's social skills in overall development and school success (Li & Feng, 2013) and the need for Chinese preschool curricula to emphasize social education. Promoting the social development of young children has been highly valued in mainland China and, in 2001, the social domain officially became one of the five curricular domains/content areas in preschools nationwide. The introduction of China's One-Child policy in 1978 has also been responsible for the growing emphasis on social education during the preschool years, given concerns raised about the social skills of young Chinese children who were only children without siblings (Yuan & Wang, 2008; Zhou, 1998).

Researchers have documented similarities across countries about the importance of promoting young children's social development and learning through comparative analyses involving the United States, China, Turkey, and South Korea (McMullen et al., 2005). Based on content analyses conducted with early learning standards, guidelines, foundations, or preschool curricular guidelines from five different countries (i.e., China, Japan, United Kingdom, United States, and Canada), Yu (2012) found a number of core competencies in the social domain that were universally present and valued across countries. These cross-cultural, core competencies included (a)

developing self-awareness and positive attitudes and beliefs about self, (b) engaging in social interactions with others and developing the ability to establish positive and rewarding relationships with others, and (c) understanding and complying with social norms and forming good habits. To support children to acquire these and other important social, emotional, and behavioral competencies, preschool teachers need to use intentional teaching practices (Epstein, 2009).

In the United States, one of the most comprehensive multi-tiered frameworks that has been used to identify and organize environmental, interactional, and instructional teaching practices to promote preschool children's social-emotional competence and to prevent or address challenging behavior is the *Pyramid Model* (Fox, Carta, Strain, Dunlap, & Hemmeter, 2010; Hemmeter, Fox, & Snyder, 2014). The present study was designed to examine Chinese preschool¹ teachers' perspectives about social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two nationally recognized and influential Chinese documents focused on early childhood learning standards.

In this chapter, the context for the present study and a statement of the problem are provided to situate the need for the study. The purpose and conceptual framework are described and research questions are stated. A description of the significance of the study is provided to highlight the relevance of the findings for early childhood researchers, policymakers, and practitioners. Delimitations and limitations of the present study are also presented in this chapter.

¹ "Preschool" is the term used in the United States and in the English language. In mainland China, the term 幼儿园 means "kindergarten" when translated.

Context for the Study

Policy Context for the Study

Young children have long been recognized as the country's future in mainland China (Wu, Young, & Cai, 2012). Early childhood education (ECE) in mainland China refers to care and education for children from birth to age 6 and before they enter grade 1. ECE is a component of China's basic education system, but it is neither compulsory nor free. Since the Economic Reform and Open Door policy in 1978, China has made remarkable achievements in each aspect of education, including the development of ECE. During this time, the number of preschools, teachers, and enrolled children has risen rapidly (Liu & Pan, 2013). For example, the total number of children enrolled in preschools rose from 11.5 million in 1980 to 44.1 million in 2016 (Department of Development & Planning, 2017). The educational level and qualifications for preschool teachers have largely improved; and governments from central to local levels gradually have increased the investment in ECE programs (Pang, 2009).

To promote further equal access to education, the Central People's Government of the People's Republic of China (PRC) promulgated the *Outline of China's National Plan for Medium and Long-Term Education Reform and Development (2010-2020)*. This document presented a blueprint for achieving the modernization of education in a 10-year period and set up a series of concrete goals to be achieved for all levels of education. ECE received significant attention in China's *Outline* and its later related policies. In China's *Outline*, universalizing preschool education was set as a high-priority goal in the development of ECE. China's *Outline* declared that 95% of Chinese children should receive at least 1-year of preschool education and 75% of children should receive a 3-year preschool education by 2020 (State Council, 2010). From 2011 to 2013,

the Central People's Government invested ¥34.1 billion Chinese yuan (equal to \$5.1 billion US dollars) to support the development of preschool education in rural areas, especially in the central and western regions in mainland China (Song, Zhu, Xia, & Wu, 2014). Since the landmark decision by the Central People's Government in 2010 to strongly expand preschool education, the country has witnessed a dramatic increase in the gross enrollment rate in the percentage of preschool children receiving 3 years of preschool education, from 50.9% in 2009 to 75.0% in 2016. As of 2016, China had a total of 239,812 preschools and the number of full-time preschool teachers was 2.2 million (Department of Development & Planning, 2017).

Given the increasing number of children attending preschools, the Ministry of Education (MOE) of the PRC issued two milestone documents in preschool education to improve the quality of preschools, China's *Guidance for Preschool Education – Trial Version (Guidance)* and China's *Early Learning and Development Guidelines for Children 3-6 Years Old (ELDG)*. Issued by the MOE in 2001 and widely considered the most influential source on teaching practices used in preschools in mainland China, the *Guidance* organized preschool curriculum into five domains/content areas: health, language, social, science, and art. The *Guidance* elaborated educational goals for children in the social domain into five operational objectives: (a) engage in activities and show confidence; (b) be willing to interact with others; develop helping, cooperating, and sharing behaviors; and show empathy for others; (c) understand and comply with social rules or social norms; (d) try hard to do what one is capable of, do not be afraid of difficulties, and demonstrate emerging responsibility; and (e) love parents, elders, teachers, and peers; love the collective, hometown, and country (Ministry of Education,

2001). Two dimensions exist in these five objectives: social relationships and mental structure. Social relationships are comprised of a child's concept of self, relationships with others, relationships with social groups or the collective, and relationships with the society. Mental structure involves the cognitive, affective, and behavioral components of social development. The combination of these two dimensions informed the content of learning and instruction in the preschool social domain, as well as the objectives of social development for preschool children (Department of Basic Education, 2002).

In 2012, the MOE promulgated China's ELDG to provide further guidance on education and care for preschool children. To be consistent with the five preschool curricular domains, social was designated an independent domain for which China's ELDG provides specific expectations for children's growth, development, and learning with the ultimate goal to promote children's social competence. The domain of social learning and development in China's ELDG consists of two subdomains: social interaction and social adaptation. Generally speaking, social interaction is related to a child's relationships with an individual, and social adaptation is associated with a child's relationships with a social group. In China's ELDG, each subdomain is broken out into one or more goals, and behavioral markers² are organized under each goal and are specified for children ages 3- to 4-years-old, 4- to 5-years-old, and 5- to 6-years-old, corresponding to the typical three age groups of Chinese preschool classrooms.

Four goals in the social interaction subdomain are (a) be willing to interact with others; (b) get along well with peers; (c) show self-esteem, assertion, and autonomy; and (d) care for and respect others. Three goals in the social adaptation subdomain are

² Behavioral markers (典型表现) refer to a prescribed set of behaviors indicative of some aspect of typical performance by a particular age.

stated: (a) enjoy and adjust oneself to the group life, (b) comply with basic behavioral norms, and (c) develop a sense of belonging (Ministry of Education, 2012).

Expectations for learning and development of emotional competence (e.g., emotional understanding, emotional expression, and emotional control) are primarily specified in the health domain rather than in the social domain, under the physical and mental conditions subdomain “show emotional stability and be in a good mood” of the health domain.

Importance of Social-Emotional Competence in the Early Years

Social-emotional competence in the early years lays the foundation for children’s subsequent success in school and in life (Shonkoff & Phillips, 2000). Considerable research has documented a positive relationship between young children’s social-emotional competence and their readiness for school and early school adjustment (e.g., LaParo & Pianta, 2000; McClelland, Morrison, & Holmes, 2000). For example, researchers indicated that social-emotional competence in preschool children was an important predictor of children’s early school achievement (McClelland & Morrison, 2003; Rhoades, Warren, Domitrovich, & Greenberg, 2011). Socially competent children have the ability to develop positive peer and adult relationships that are necessary to succeed in their homes, neighborhoods, schools, and adult lives (Odom, McConnell, & Brown, 2008). Young children who are not socially and emotionally competent are more likely to exhibit challenging behavior (Dunlap et al., 2006; Hemmeter, Ostrosky, & Fox, 2006).

In mainland China, the prevalence of challenging behavior in preschool children is notable. On the basis of teacher reports, Dong (2010) estimated the prevalence of peer victimization was 12% among Chinese children ages 3 through 5. In a sample of 1,022 Chinese children ages 4 to 5, Mei and his colleagues (2003) reported the

prevalence of challenging behavior was nearly 19% as determined by parent reports on the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983). These authors also found statistically significant differences in the prevalence of challenging behavior between boys (22%) and girls (15%). Liu, Cheng, and Leung (2011) further compared Chinese and U.S. preschoolers' scores on the CBCL and the Caregiver-Teacher Report Form (Achenbach & Rescorla, 2000). Although they identified similar prevalence rates, they found Chinese preschoolers had higher scores on internalizing behaviors (e.g., withdrawn, anxious) while preschoolers in the United States scored higher on externalizing behaviors (e.g., aggression, hyperactivity).

The social-emotional competence of young children has become a topic of major concern for early childhood practitioners and families in mainland China. Due to China's One-Child policy, the majority of children currently in preschools are the only children in their families. This means these children do not have opportunities for social interaction with siblings on a daily basis before entering preschool. They often experience undivided and excessive amounts of attention from parents and grandparents and are labeled with the "4-2-1 syndrome", that is, four grandparents, two parents, and a "spoiled" child (Zhu, 2009). Kluger (2013) has described these children as "Little Emperors" – the generations of only children born under the One-Child policy. Widespread concerns about social-emotional competence and prosocial behavior are associated with these children (Tobin, Wu, & Davidson, 1989; Zhu, 2009). Studies have shown only children in China tended to be self-interested, uncooperative, and reluctant to share in their preschools (Wang, 2002).

In early 2016, this decades-long One-Child policy was relaxed such that couples in mainland China are now permitted to have two children if one part of the couple is an only child. Therefore, the possibility exists that some preschool children who are currently only children will have younger brothers or sisters in the next few years (Yuan, 2016). Within the relaxing of the One-Child policy, it is especially important to promote the social-emotional competence of Chinese only children, because they will need additional support to learn how to get along well with their siblings who will share their attention from parents and grandparents. Based on observations, surveys, and interview data gathered from 50 two-child families where the older child was 3 to 6 years of age, Zhou (2015) found those older children had difficulties in social interaction and emotional regulation and exhibited more challenging behavior after the birth of the second child in their families.

Preschool Social Education in Mainland China

Since the founding of the PRC in 1949, one of the most important achievements in contemporary preschool social education is that the social domain has become a separate and independent domain in the preschool curriculum (Liu, 2008). Aimed at promoting the social development and learning of preschool children, the objectives and content of preschool social education in mainland China focuses on cognitive, affective, and behavioral components of social development and learning of preschool children (Yu, 2000). Specifically, the cognitive component (社会认知) refers to the ability to acquire and apply knowledge about self, others, the social environment, social activities, social norms, and the social culture. The affective component (社会情感) includes the development of attachment, self-esteem, empathy, feelings of shame, moral

responsibility, knowing right and wrong, and knowing what is liked/disliked through interacting with the environment. The behavioral component (社会行为) focuses on social interaction and prosocial behavior such as sharing, cooperating, and helping (Liu, 2008). It was not until the release of the landmark document China's *Guidance* in 2001 that the social domain officially became one of the five domains in the preschool curriculum nationwide, with the other curricular domains of health, language, science, and art (Li, 2006).

Zhu (2013) summarized two teaching practice approaches to promoting the social-emotional competence of young children that have been used in preschools in mainland China: specialized approach (专门性) and embedded approach (渗透性). The specialized approach includes whole group, small group, and one-on-one lessons specifically designed to teach children skills reflective of social-emotional competence. The embedded approach involves creating learning opportunities to teach skills reflective of social-emotional competence in typically occurring activities, such as daily routines, lessons associated with other curricular domains, and as part of eduplay³ (Sun & Hu, 2015). Furthermore, instruction focused on social-emotional competence was reported to be implemented more often through an embedded approach than a specialized approach in preschool settings (Sun & Hu, 2015; Ye, 2012).

On the basis of analyzing and summarizing 425 lessons and activities collected in four nationally representative teaching materials or teacher's notebooks in the preschool social domain, Ji (2012) identified 12 themes under which social-emotional

³ Eduplay (游戏) is defined as a form of play-based education with Chinese characteristics, which captures the belief that play is a vehicle for learning. Being synonymous with the term "play," eduplay is easier to understand and carry out in Chinese preschool settings (Leung, 2011).

lessons and activities were categorized. The percentages of activities organized under each of the 12 themes were: culture and holiday celebration (16.9%), prosocial behavior and social interactions (16.2%), social environment (12.2%), emotions (11.5%), self-awareness (9.9%), nature and environmental protection (8.2%), personality (7.5%), living ability and living habits (5.6%), social rules/norms (5.4%), safety and survival (3.3%), etiquette (2.8%), and finance (0.2%) (Ji, 2012). The instructional content of the preschool social domain in mainland China was analogous to instructional content associated with two domains in the United States, that is, social-emotional development and social studies (Yu, 2012).

To date, several literature reviews have been conducted on preschool social education in mainland China; however, these reviews emphasized the development of social skills, including social skills trajectories and factors influencing the development of social skills (e.g., He, 2015; Zhao, 2011). Using a co-word analysis of 208 articles identified through searching three main Chinese electronic databases, Jiang (2015) mapped “hot” topics in the field of preschool social education, which were published in Chinese journal articles. The majority of the articles included in Jiang’s work were based solely on researchers’ experience or wisdom rather than empirical data. Through reviewing and analyzing journal articles, book chapters, and dissertations and theses published between 2011 and 2013, Hong and Jiang (2015) conducted a narrative review and identified three major themes in the Chinese empirical and non-empirical literature about preschool social education: (a) the significance and value of preschool social education, (b) the objectives and content of preschool social education, and (c) the efficacy of preschool social-emotional instruction. The authors summarized that the

existing Chinese literature offered primarily theoretical or conceptual analyses of the content and objectives of preschool social education, rather than empirical studies examining the effect of preschool social-emotional teaching practices on children's development and learning when delivered either through the specialized approach or the embedded approach (Hong & Jiang, 2015).

Pyramid Model for Promoting Social-Emotional Competence in Young Children

Designed as a framework for organizing evidence-based teaching practices for promoting the social, emotional, and behavioral development of young children, the *Pyramid Model* includes universal, secondary, and tertiary teaching practices to support the social-emotional competence of all children, the provision of targeted preventive social-emotional supports for children with or at-risk for social-emotional delays, and individualized positive behavior supports for children with significant or persistent challenging behavior (Fox et al., 2010; Hemmeter et al., 2014). The development of the *Pyramid Model* was influenced by public health models of promotion, prevention, and intervention, as well as school-wide, multi-tiered systems of positive behavior intervention and supports. The social, emotional, and behavioral teaching practices associated with the *Pyramid Model* were identified and selected for inclusion in the model based on reviews of the research on (a) effective instruction for young children, (b) strategies to promote child engagement and appropriate behavior, (c) the promotion of children's social and emotional skills, and (d) the implementation of individualized assessment-based behavior support plans for children with the most severe challenging behavior (Hemmeter et al., 2014).

In the United States, select numbers of preschool teachers from all 50 states have received training on the *Pyramid Model* through the Center on the Social and

Emotional Foundations for Early Learning (CSEFEL) and the Technical Assistance Center on Social Emotional Intervention for Young Children (TACESI). Thousands of trainers and coaches have been trained to support infant/toddler and preschool teachers' implementation of the *Pyramid Model* practices (Hemmeter et al., 2014). The functional relationship between a multicomponent professional development intervention and preschool teachers' fidelity of implementation of the *Pyramid Model* practices has been supported through a single case experimental design (Fox, Hemmeter, Snyder, Binder, & Clarke, 2011). Findings from a potential efficacy randomized trial involving 40 preschool teachers in Tennessee and Florida further demonstrated the effectiveness of a professional development intervention on teachers' use of the *Pyramid Model* practices and collateral effects on the social skills and challenging behavior of preschool children (Hemmeter, Snyder, Fox, & Algina, 2016).

Although most of the empirical studies focused on the *Pyramid Model* are conducted in the United States, in recent years, the *Pyramid Model* is receiving more attention internationally. For example, Heo et al. (2014) surveyed 256 Korean early childhood educators to gather their perspectives about the social-emotional teaching practices associated with the *Pyramid Model*. The *Pyramid Model* has been recently documented in the Chinese professional literature and has been viewed as valuable by Chinese researchers (e.g., He & Zhang, 2014; Hu & Cao, 2011). Furthermore, a pilot study examining Chinese preschool teachers' use of *Pyramid Model* practices supports the feasibility and appropriateness of applying the *Pyramid Model* into the socio-cultural context of mainland China (Luo, Snyder, Clark, & Hong, 2017). Using a two-group pretest-posttest design, Lam and Wong (2017) found an intervention program based on

the *Pyramid Model* was effective in increasing social competence and decreasing challenging behavior of Chinese preschool children in Hong Kong.

Statement of the Problem

Given the recognized importance of social-emotional competence to children's achievements during the preschool years and throughout their lives and the need to effectively address children's social-emotional learning and development within the socio-cultural context of mainland China, early childhood researchers and practitioners in mainland China have placed increasing attention on preschool social education over the last 30 years. Although the social domain has officially been one of the five preschool curricular domains since 2001, the Chinese empirical and non-empirical literature suggests the social domain has been somewhat neglected during instruction, is the most difficult domain for preschool teachers to teach among the five curricular domains, and that preschool teachers are less familiar with strategies for teaching young children skills associated with social-emotional competence (Ji, 2011; Tian, 2013). Literature reviews of preschool social education showed that the existing Chinese literature was dominated by theoretical or conceptual analyses rather than empirical studies (Hong & Jiang, 2015; Jiang, 2015).

To date, only one published study was identified that empirically examined Chinese preschool teachers' implementation of social education (i.e., Ye, 2012). This study surveyed lead teachers from 42 preschool classrooms in four provinces by using an author-developed 20-item instrument to investigate these preschool teachers' (a) knowledge and attitudes toward preschool social education, (b) implementation of preschool social education, and (c) challenges in preschool social education. Based on the results from the study, the author suggested that although teachers realized the

importance of preschool social education, they implemented much fewer lessons and activities associated with the social domain than the other four curricular domains. With respect to their reported teaching practices, the participating preschool teachers primarily used strategies involving conversations and discussions to teach children social skills. The greatest challenge in preschool social education reported by these preschool teachers was the lack of support systems from preschool administrators and families (Ye, 2012). However, neither the instrument development process nor the psychometric properties of the instrument used in the study was described by Ye (2012), which limits the validity of inferences that can be derived from the reported findings. In addition, only very general information about preschool social-emotional instruction was gathered from teachers (e.g., whether and when teachers implemented a social-emotional lesson, objectives for the social-emotional lesson, and instructional approaches to teach social-emotional competence). The author did not examine the specific teaching practices that preschool teachers were using to promote social-emotional competence and address challenging behavior of young children.

A need exists to characterize and quantify the teaching practices that Chinese preschool teachers are using to promote the social, emotional, and behavioral development of young children (Jiang, 2015). The growing interest in characterizing teaching practices has necessitated the development of instruments to measure preschool teachers' implementation of social, emotional, and behavioral teaching practices. To date, however, instruments related to the preschool social domain have primarily focused on the social-emotional development of young children rather than teachers' behaviors or teaching practices (He, 2015; Zhao, 2011).

Purposes of the Present Study

The purposes of the present study were (a) to develop and validate the content of a culturally relevant questionnaire focused on preschool social, emotional, and behavioral teaching practices, (b) to gather preliminary structural validity and internal consistency score reliability evidence for the questionnaire using data obtained from Chinese preschool teachers, and (c) to use the questionnaire to examine Chinese preschool teachers' perspectives about social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two nationally recognized and influential Chinese early childhood learning standards documents. The questionnaire developed for the present study was titled the Social-Emotional Teaching Practices Questionnaire-China (SETP-C; Snyder & Luo, 2017). The SETP-C has been developed and various sources of validity evidence have been gathered using systematic and iterative quantitative and qualitative approaches, particularly through the lenses of Chinese early childhood researchers, leaders, practitioners, and master's students in preservice training programs. The SETP-C has been translated into Chinese (Simplified) and back-translated into English based on recommended procedures and guidelines (Brislin, 1986; Guillemin, Bombardier, & Beaton, 1993). The present study was among the first conducted in mainland China that explored Chinese preschool teachers' perspectives about teaching practices for promoting social-emotional competence and addressing challenging behavior of young children. Following the development and initial validation activities that resulted in the version of the SETP-C used in the present study (see Chapter 3 for detailed descriptions of the development and initial validation activities), the following four research questions were addressed:

1. Based on the SETP-C data obtained from a sample of Chinese preschool teachers, is there score validity evidence that supports internal structure and score reliability evidence that supports internal consistency?
2. What are Chinese preschool teachers' perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practices as measured by the SETP-C?
3. To what extent are teacher or classroom characteristics (role, professional title, education, major, certification, teaching experience, curriculum, child-to-teacher ratio, child age, inclusion of children with disabilities, enrollment of children with persistent challenging behavior) and features of preschools (city, region, funding source, quality rating) associated with Chinese preschool teachers' ratings of use and confidence with implementing teaching practices as measured by the SETP-C?
4. Do Chinese preschool teachers with different individual, classroom, and preschool characteristics vary in the types of supports they report are needed to prepare them to implement preschool social education⁴?

Conceptual Framework Guiding the Present Study

The *Pyramid Model* (Fox et al., 2010; Hemmeter et al., 2014) and the Teaching Pyramid Observation Tool for Preschool Classrooms (TPOT; Hemmeter et al., 2014) guided the conceptualization of the primary constructs that the SETP-C was intended to measure. Additional information about the *Pyramid Model* and the TPOT is provided below.

Pyramid Model

The *Pyramid Model* is a multi-tiered promotion, prevention, and intervention framework that organizes environmental, interactional, and instructional practices designed to support the social, emotional, and behavioral competencies of young children (Fox et al, 2010; Hemmeter et al., 2014). The universal tier of the *Pyramid Model* includes practices related to the provision of nurturing and responsive

⁴ "Preschool social education" is the term used in the survey, because it was determined to be a more culturally sensitive translation of social, emotional, and behavioral teaching practices in the Chinese context.

relationships and high quality supportive environments, which are critical for promoting the social-emotional competence of all children. Particular emphasis is placed on practices in which the teacher engages in responsive and positive interactions with children and develops partnerships with families and colleagues. Teaching practices associated with relationships and interactions include joining in children's play, engaging in supportive conversations with children, providing encouragement and feedback to children, developing partnerships with families, and establishing collaborative relationships among classroom team members. The second category of universal practices is related to the provision of predictable and supportive environments and teaching practices that support children's engagement in classroom activities and routines. Teaching practices include those associated with implementing a developmentally appropriate and balanced schedule of activities, explicitly teaching children about the classroom schedule, structuring smooth transitions between activities, teaching and promoting a small number of classroom rules or behavior expectations, providing clear directions, and providing engaging activities (Fox et al., 2010; Hemmeter et al., 2014).

The secondary tier of the *Pyramid Model* focuses on the provision of explicit instruction in social skills and emotional competencies and the prevention of challenging behavior. Considering the developmental nature of challenging behavior, most young children might engage in challenging behavior at some point, thus, it is often difficult to precisely identify each child's level of risk. In addition, all children will require adult guidance and instruction in social-emotional skills, such as how to appropriately express their emotions, play cooperatively with peers, and use social problem-solving strategies.

More systematic and focused instruction is necessary, however, to teach children who are at risk of developing challenging behavior or who have delays in social or emotional skills. Therefore, this tier of the *Pyramid Model* includes teaching of social-emotional skills for all children and the delivery of targeted teaching that is differentiated and systematic for some children who need more support. According to the *Pyramid Model*, the content of teaching at this tier includes identifying and expressing emotions, self-regulation, social problem solving, initiating and maintaining interactions, cooperative responding, strategies for handling disappointment and anger, and friendships skills (Fox et al., 2010; Hemmeter et al., 2014).

At the tertiary tier, teaching practices associated with developing, implementing, and evaluating comprehensive and assessment-based individualized behavior support plans are intended to address persistent challenging behavior and support the development of socially acceptable replacement skills. When a child has persistent challenging behavior that is not responsive to instructions and supports at the previous tiers, a collaborative team is formed to engage in the process of individualized positive behavior support (I-PBS). At the center of the collaborative team are the child's family, teachers, and other primary caregivers. The I-PBS process begins with functional assessment to gain a better understanding of the functions of the child's challenging behavior and factors related to his/her challenging behavior. The collaborative team then develops potential behavior support teaching or intervention strategies based on the information gathered from functional assessment. Employing the Prevent-Teach-Reinforce model (Dunlap, Wilson, Strain, & Lee, 2013), the behavior support plan includes antecedent prevention strategies to address the triggers of challenging

behavior, replacement skills that are alternatives to the challenging behavior, and consequence strategies that ensure challenging behavior is not reinforced or maintained and the replacement behavior is reinforced or maintained (Fox et al., 2010; Hemmeter et al., 2014).

Teaching Pyramid Observation Tool for Preschool Classrooms

The TPOT is an instrument designed to measure classroom-wide implementation of universal and targeted teaching practices associated with the *Pyramid Model* and the teacher's capacity to individualize teaching practices and implement individualized behavior support plans at tier three (Hemmeter et al, 2014). The TPOT is completed based on a combination of at least a 2-hour observation in a preschool classroom and a 15- to 20-minute interview with the teacher. Based on the observation and interview data, assessors make judgments about teachers' implementation of teaching practices. The TPOT includes a total of 137 teaching practice indicators organized under three subscales: Key Practices, Red Flags, and Response to Challenging Behavior. Fourteen items and 114 indicators are associated with the Key Practices subscale: (a) schedules, routines, and activities ($v^5 = 10$), (b) transitions between activities are appropriate ($v = 8$), (c) teachers engage in supportive conversations with children ($v = 10$), (d) promoting children's engagement ($v = 9$), (e) providing directions ($v = 7$), (f) collaborative teaming ($v = 9$), (g) teaching behavior expectations ($v = 7$), (h) teaching social skills and emotional competencies ($v = 8$), (i) teaching friendship skills ($v = 9$), (j) teaching children to express emotions ($v = 8$), (k) teaching problem solving ($v = 9$), (l) interventions for

⁵ v presents the number of indicators associated with a particular item on the TPOT.

children with persistent challenging behavior ($v = 5$), (m) connecting with families ($v = 8$), and (n) supporting family use of the *Pyramid Model* practices ($v = 7$).

Red Flags include 17 practices that are inconsistent or incompatible with the implementation of the *Pyramid Model*. Six indicators are associated with the teaching practices used to address challenging behavior when it occurs during a TPOT observation (three indicators are considered as essential strategies and the other three indicators are identified as additional strategies that are appropriate for use with some, but not all, instances of challenging behavior). With respect to scoring, teaching practice indicators that are organized under each item on the TPOT are scored as Yes (*present*), No (*not present*) or N/O (*no opportunity*; four indicators can be scored no opportunity).

Significance of the Study

The present study extends the current knowledge base about preschool social education in mainland Chinese context in a number of ways. First, to date, there have been no published studies identified that have empirically examined Chinese preschool teachers' self-reported use of and confidence with implementing social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two Chinese early childhood learning standards documents. Findings from the present study provide information about Chinese teachers' reported implementation of social, emotional, and behavioral teaching practices, as well as teacher, classroom, and preschool characteristics influencing their implementation. Second, an instrument designed to measure Chinese preschool teachers' perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practices has been developed and preliminary psychometric integrity evidence for the instrument were gathered. Only few instruments measuring preschool social education have been

located in the empirical and non-empirical Chinese literature (e.g., Ye, 2012). These instruments do not measure specific social, emotional, or behavioral teaching practices in preschool classrooms and scant psychometric integrity evidence is available for the existing measures. This study makes a noteworthy contribution to the measurement of environmental, interactional, and instructional teaching practices associated with preschool social education in mainland China. Third, findings from this study will help researchers, policymakers, and practitioners characterize preschool teachers' self-reported use of practices, and their confidence in implementing social, emotional, and behavioral teaching practices. This information might be useful for informing the design of professional development or preservice training for preschool teachers in mainland China. Finally, the present study contributes to a growing body of international research focused on the *Pyramid Model*.

Delimitations

The present study was delimited to gathering self-report information from Chinese preschool teachers about their use of and confidence with implementing social, emotional, and behavioral teaching practices. No direct observations were conducted on teachers' implementation of these teaching practices. The survey data used in the present study were collected at one point in time and were gathered from a defined target population of preschool teachers from Beijing and Ningbo in mainland China.

The present study was a correlational study. Results of present study relied on cross-sectional survey data. Causal direction of associations between individual, classroom, and preschool characteristics and teachers' reported frequency and confidence in use of social, emotional, and behavioral teaching practices cannot be ascertained.

The focus of the present study was preschool teachers' self-reported social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two Chinese early childhood learning standards documents. The effects of Chinese preschool teachers' use of social, emotional, and behavioral teaching practices on children's developmental or learning outcomes was not examined in the present study.

Limitations

A number of limitations of the present study are noted. First, the development and validation of the SETP-C were primarily focused on gathering content and structural validity evidence in the Chinese cultural context. Validity evidence based on SETP-C relations to other variables was not addressed due to limited resources. Relationships between SETP-C scores and other measures intended to assess the same/similar or different constructs were unknown. Second, multiple sources of information, methods, and measures are recommended in early childhood assessment (National Research Council, 2008). The present study employed only one measurement instrument (i.e., SETP-C) and one method (i.e., self-report) to measure Chinese preschool teachers' perspectives about the teaching practices aligned with the *Pyramid Model* and two Chinese early childhood learning standards documents. Direct observations of Chinese teachers' use of social, emotional, and behavioral teaching practices in the classrooms were not conducted nor were judgments about their teaching practices obtained from other informants. Third, although a nationwide geographically representative sample was involved in the content validation of the SETP-C, teachers recruited for the present study were preschool teachers from two economically powerful metropolises in mainland China (i.e., Beijing and Ningbo). These teachers might not be representative of the population of Chinese preschool teachers across mainland China. Their

perspectives about social, emotional, and behavioral teaching practices might be associated with policies or curriculum guidance specific to these two cities. Considering the remarkable diversity in socioeconomic development across mainland China, results from the present study should not be generalized to all preschool teachers in mainland China.

CHAPTER 2 REVIEW OF THE LITERATURE

This chapter describes a systematic review of the literature relevant to the present study. The systematic review was conducted to identify and summarize teaching practices for promoting social-emotional competence of preschool children that have been empirically studied in Chinese preschools. This systematic review of the Chinese literature on the status of social-emotional instruction implemented in Chinese preschools provides the rationale and background information for the present study. The systematic review covered five major topics (a) type of empirical evidence reviewed, (b) characteristics of study participants, (c) conditions under which social-emotional instruction was implemented, (d) components of social-emotional instruction, and (e) focus and approaches to teaching children social-emotional competence.

The first topic area addressed in the review focused on the dates and research designs of the existing empirical studies on preschool social-emotional instruction in mainland China. The second and third topic areas provided information about the children for whom social-emotional instruction worked and the conditions under which social-emotional instruction was implemented. With emphasis on the identification of practices that were aligned with core constructs associated with social-emotional teaching practices as reflected on the TPOT and aligned with two Chinese early childhood learning standards document, a review of the key components and critical features of social-emotional instruction (i.e., fourth and fifth topics) provided a rationale for the present study by highlighting the feasibility and appropriateness of using the *Pyramid Model* as a conceptual framework to develop items for the SETP-C designed to

measure Chinese preschool teachers' use of and confidence with implementing social, emotional, and behavioral teaching practices.

Review Procedures

Search Strategy

A systematic search of nine common English and Chinese educational electronic databases was conducted in April 2016. Five English databases were searched: Academic Search Premier, Education Full Text, ERIC (ProQuest), ProQuest Social Science Journals, and PsycINFO. The four Chinese databases searched were China Academic Journals Full-text Database (中国期刊全文数据库), Chinese Studies Online from Wanfang-China Online Journals (万方数据—学术期刊), China Science and Technology Journal Database (中文科技期刊数据库), and China National Social Science Database (国家哲学社会科学学术期刊数据库).

The electronic database search procedure was adapted from the systematic search procedures specified in the *Conducting evidence reviews for the DEC recommended practices: Guidelines and procedures manual* (DEC Evidence Synthesis Group, 2016a). Figure 2-1 illustrates the general search methods for this review. The natural language search terms were organized under three areas: instruction, social-emotional domain, and child outcome.

To ensure precise and comprehensive searching, each natural language search term was then searched for its corresponding “controlled vocabulary” using the thesaurus for each database searched in English. The natural language and controlled vocabulary search terms were combined using the OR or AND Boolean logic as shown in Figure 2-1. Because controlled vocabulary terms in English databases typically are

unique to each database, each database was searched separately using the natural language and controlled vocabulary terms. Then, two search filters were applied to all searches in each database: filter for age (birth to 6) and filter for country (China). Finally, type of publication during each database search was set to include only journal articles (peer-review articles in English databases). Appendix A shows the electronic search strategy for one of the English databases.

To make the search strategies consistent between the English and Chinese electronic databases, each natural language search term used in the English databases was literally translated into Chinese (i.e., word-for-word translation). However, sometimes the way a meaning or concept is expressed in one language might differ in the other language. On the rare occasions when literal translation of a search term into Chinese was misleading, other feasible methods associated with the equivalence effect in the Chinese translation of English search terms were used. Given there is no “controlled vocabulary” function in the Chinese databases, synonymous, related, or hierarchical terms (e.g., broader term, narrower term) associated with each translated search term in the thesaurus of the Chinese database were also searched. These related search terms were combined using Chinese Boolean language “+” (which equals the English Boolean “OR” function) and “*” for the “AND” function. Unlike searches in the English databases, search terms related to country filter were not used in the Chinese databases because almost all studies retrieved from the four Chinese electronic databases were conducted in the PRC.

Another modification in the Chinese database search was adding search terms associated with social-emotional instruction, such as “social curricul*”, “social train*”,

“social intervent*” for the purpose of limiting the search records to a reasonable number of studies. Similar to the English database search, each of the four Chinese databases was searched separately.

The records (or search results) from the English and Chinese databases search were imported and combined into the reference management software EndNote X7. An ancestral search was conducted to locate relevant studies that were not found in the electronic database search, which included a search of the reference lists of included studies that met the inclusion criteria (backward search) and searching studies that have cited each included study (forward search). Google Scholar was used in the forward search for included studies written in English, while the “citing documents” function in the China Academic Journals Full-text Database (under “Knowledge Network” section) was used for included studies written in Chinese.

Inclusion and Exclusion Criteria

Once the deduplication of electronic records had been completed, all records in the EndNote X7 software and records from ancestral search were assessed for inclusion through a two-stage procedure. First, the title and abstract of each record were screened to eliminate records that clearly did not meet the inclusion criteria. As a result, a list of possible studies was identified and subjected to the next step. Full texts of the articles deemed as possibilities were then examined against the inclusion criteria.

For a study to be included in the review, it had to meet the following inclusion criteria. First, the study had to be published in a journal. Second, the study had to be empirically based research focused on social-emotional instruction. In this review, social-emotional instruction was defined as intentional and systematic teaching specifically designed to provide learning experiences or opportunities for preschool

children to develop their social-emotional competence (Liu & Feng, 2005). Third, the social-emotional instruction had to target preschool-aged children. Specifically, the average child age at study onset was between 36 to 72 months (not including 72 months). If the average child age was not reported, then all child participants had to be enrolled in a preschool when the study was conducted to be included. In mainland China, preschool has a different name, “you er yuan” (幼儿园), which literally means “kindergarten” in Chinese/Mandarin, usually referring to full-day education and care programs serving children ages 3 to 6. Fourth, the study was conducted in preschool settings in the PRC. Covering approximately 9.6 million square kilometers, the PRC exercises jurisdiction over 22 provinces, 5 autonomous regions, 4 direct-controlled municipalities (i.e., Beijing, Tianjin, Shanghai and Chongqing), and 2 mostly self-governing special administrative regions (i.e., Hong Kong and Macau), and claims sovereignty over Taiwan. Given the difficulties associated with database access in Hong Kong, Macao, and Taiwan, this review only included studies conducted in mainland China. Fifth, the study had to report either a social competence outcome or emotional competence outcome for the preschool children who were participants in the study. Sixth, the study had to demonstrate a statistical, functional, or temporal relationship between the social-emotional instruction and child outcome(s). In other words, the study design had to fit into one of four research design categories: single-case experimental research designs, group experimental research designs, correlational research designs, or explanatory case study research designs. Seventh, the study had to be written in either English or Chinese. Studies written in other languages were excluded in this review.

Coding Variables and Procedures

To summarize the existing empirical literature on preschool social-emotional instruction in mainland China, a coding form and manual to review identified studies were developed. The coding form was adapted from the *DEC Recommended Practices – Evidence Syntheses Generic Coding Sheet* (DEC Evidence Synthesis Group, 2016b) and *Coding Scheme for Group Experimental Design Studies* (DEC Evidence Synthesis Group, 2016c). Data were extracted under the following five categories.

Research designs. In addition to categorizing each study into the four research designs eligible for inclusion in this review, the student investigator further specified the research design of each included study. For example, group experimental research designs include experimental, quasi-experimental, and pre-experimental designs. The most common single-case experimental research designs include A-B studies, reversal studies, multiple baseline designs, alternating treatment design studies, and multiple treatment design studies (DEC Evidence Synthesis Group, 2016a).

Participant characteristics. Study participants of interest were child and adult participants (i.e., instruction agents). Coding variables for child participants were sample size, gender, age, disability status, challenging behavior, child risk factors, and family income. Coding for adult participants involved the following variables: sample size, gender, age, level of education, professional role of adult participants, teaching experience in early childhood settings (birth to 6), and training.

Three coding variables were associated with training of instruction agents. First, the student investigator recorded the type of professional who provided training to instruction agents. Second, the student investigator recorded whether the study detailed specific training (e.g., amount of training, training to criterion) or qualifications (e.g.,

professional credentials) required to implement the social-emotional instruction. Third, the student investigator recorded the type of training (e.g., workshops, coaching) provided to instruction agents.

Setting and context. When coding for setting and content, the student investigator documented the primary setting in which the study was conducted (e.g., inclusive classroom, segregated classroom), format of instructional group, type of preschool the child participants were attending (i.e., public, private), age group of preschool classes, and geographic location of the study. Format of instructional group captured the make-up of the child/group of children the social-emotional instruction was targeting, including one target child, identified target children, small group, large group, whole group, and program-wide. Generally, preschool children in mainland China are grouped by age and three age groups of preschool classes are usually specified: junior class (3- to 4-year olds; 小班), middle class (4- to 5-year-olds; 中班) and senior class (5- to 6-year olds; 大班). However, other types of preschool classes exist in some programs, such as toddler class (托班), mixed-age class (混龄班), and pre-primary class (affiliated in elementary schools; 学前班). In addition, if a named intervention (e.g., *Pyramid Model*) or curriculum (e.g., Second Step) was used in the included study, the student investigator recorded the name of the intervention or curriculum.

Components of instruction. Each study was examined to determine whether the authors reported implementing the four key components of instruction as described by Snyder, Hemmeter, McLean, Sandall, and McLaughlin (2013): what to teach, when to teach, how to teach, and how to evaluate. The what to teach component was categorized based on the teaching practices reflected on the TPOT (Hemmeter et al.,

2014) and social-emotional instructional content aligned with China's ELDG. A total of 12 categories of instructional content were specified in this review: teaching behavior expectations (TBE), teaching friendship skills (TFR), teaching social problem solving (TPS), teaching social interaction with peers (TIP), teaching social interaction with adults (TIA), teaching social independence (TSI), teaching social cooperation (TSC), teaching social responsibility (TSR), teaching social adjustment (TSA), teaching children to express emotions (TEE), teaching children to understand emotions (TUE), and teaching children to regulate emotions (TRE). Four of these categories were directly aligned with teaching practices on the TPOT (which are labeled as TPOT Key Practices items), while the other eight categories were indirectly aligned with teaching practices on the TPOT. The categories of instructional content specified for this review and associated operational definitions were developed by the student researcher and reviewed by her major professor. Three iterations of the categories and associated definitions were developed and then reviewed before using them in the present review.

The when to teach component was organized into five categories: teacher-directed activity, child-initiated activity, transition, routine, and outdoor activity. The how to teach component captured the instructional procedures/strategies to teach the specified social-emotional content.

With particular emphasis on the fidelity of implementation, the how to evaluate component under this section focused on whether social-emotional instruction was implemented as planned. Evaluating if social-emotional instruction resulted in child learning was captured in the child outcome section. The findings related to child

outcomes are not included in this chapter, because they are not relevant to the focus of the present study.

Given the social-emotional instruction might have been implemented by those who were not regularly interacting with children (e.g., researchers), another variable associated with the components of instruction was added, that is, the who is teaching component. In addition, the dose of social-emotional instruction was quantified by recording frequency (i.e., number of teaching episodes per week), duration (i.e., total length of instruction in terms of weeks), intensity (i.e., amount of time within each teaching episode), and cumulative dose, when possible to calculate from other dose data provided (product of frequency \times duration \times intensity).

Instruction approach and focus. Instruction agents can help preschool children develop social-emotional competence through several types of approaches. Consistent with the two approaches in preschool social education in mainland China (i.e., specialized and embedded), four types of instruction approaches were specified in this review: explicit social-emotional lessons, integration with other curricular domains, eduplay, and infusion into daily routines. Being aligned with the three tiers of instructional support associated with the Pyramid Model, the focus of social-emotional instruction was grouped into three categories: universal practices (i.e., instruction was used to support the social-emotional competence of all children), secondary practices (i.e., targeted instruction was provided to children who are at risk of developing challenging behavior or who have delays in social-emotional development), and tertiary practices (i.e., individualized instruction was provided to children with persistent challenging behavior).

Summary of Studies Reviewed

A total of 25,164 records were located through the systematic search of nine electronic databases, with an additional 1,397 studies identified in the ancestral search. A PRISMA flow diagram summarizing the search and selection process is shown for English and Chinese databases, respectively (see Figures 2-2 and 2-3). After title and abstract screening, 351 records were retained for full-text review. Five journal articles describing five studies identified through the English databases search and 77 journal articles describing 75 studies retrieved from the Chinese databases were found to meet the inclusion criteria. However, four of these studies (written in Chinese) were identified in both English and Chinese databases searches. After removing duplicate publications and identification, 76 published studies dating back to 1986 were included in the systematic review.

Type of Empirical Evidence

As shown in Figure 2-4, the earliest empirical study identified in this review was published in 1986, which supports findings from a previous review indicating that the mid-1980s was a turning point in mainland China for the psychological and educational research on the social-emotional domain (Dong & Xia, 1991). Publication dates for the final corpus of 76 studies ranged from 1986 to 2016 (i.e., before April 2016). Two studies were published in the 1980s, 20 studies in the 1990s, 25 studies from 2000 to 2009, and 29 studies from 2010 to 2016. Nearly one-third of the included studies were conducted by researchers from three Chinese universities: Tianjin Normal University ($n^1 = 11$), Liaoning Normal University ($n = 9$), and Beijing Normal University ($n = 5$).

¹ n in this chapter represents the number of studies included in the review.

Of the 76 studies included, six studies were single-case experimental research designs (SCERDs), 10 were explanatory case study research designs (ECSRDs), and 60 were group experimental research designs (GERDs). No correlational research design studies were identified that met the inclusion criteria. Specifically, with respect to SCERDs, the six studies included were four reversal designs (i.e., ABAB), one was a multiple baseline design across subjects, and one was an A-B design study. Regarding GERDs, the most common design across the included studies was quasi-experimental designs ($n = 40$), followed by experimental designs ($n = 15$) and pre-experimental designs ($n = 5$).

In summary, although results of this review indicate an increase in empirical research focus on preschool social-emotional instruction as evidenced by the increasing numbers of published studies since 1986, the number of empirical studies is still relatively small. Group quasi-experimental studies comprised 53% of studies included in this review with nearly 20% of included studies characterized as experimental designs. Researchers in the areas of developmental psychology or child development from Chinese normal universities primarily conducted these empirical studies.

Characteristics of Study Participants

Child participants. Sixty-eight of the 76 reviewed studies (89.5%) reported the sample size of child participants. A total of 8,468 preschool children were involved in these studies. The number of child participants ranged from 1 to 1,587 across studies. Child gender was reported for 2,634 preschool children included in 34 reviewed studies (1,350 males and 1,284 females). Mean ages were reported for 2,758 children involved in 27 studies ($M = 4.8$ years, $SD = 0.7$), and age ranges were reported for 3,545 children in 19 studies (range = 2.5 to 7.0 years). Only one study reported including a

child with disabilities (i.e., Yao & Mao, 2011). This child had been diagnosed with autism spectrum disorder at age 4 in a hospital (i.e., Peking University Sixth Hospital) by using the Chinese version of the Childhood Autism Rating Scale (CARS; Schoper, Reichler, DeVellis, & Daly, 1980). Characteristics of child participants and study settings across all included studies are shown in Table 2-1.

Sixty-three preschool children with challenging behavior participated in 11 included studies (five SCERDs studies, two GERDs studies, and four ECSRDs studies). For type of challenging behavior, 25 children in eight studies were characterized as having internalizing behavior challenges, such as social withdrawal and shyness. Thirty-eight children in two studies were identified as having externalizing problems, such as aggressive behavior and attention-deficit/hyperactivity disorder. Five studies reported the instruments used to identify preschool children with challenging behavior, such as the Chinese version of the Child Behavior Checklist (Achenbach, n.d.), the Chinese version of the Children's Behavior Questionnaire (Putnam & Rothbart, 2006), the Young Children's Social Withdrawal Survey–Teacher Form (Ye, n.d.) (叶平枝编制的《幼儿社会退缩教师评价问卷》), and the Young Children's Social Behavior Observation Form (Zuo, Xi, & Shi, 2012) (左志宏编制的《幼儿社会行为观察表》). In addition, data on socioeconomic status were reported in only one study for a child who was from a family characterized as middle class.

Risk factors were reported for 438 preschool children who participated in eight reviewed studies (one SCERD study, six GERDs studies, and one ECSRD study), including neglected peer status, rejected peer status, and single-parent household. According to their sociometric status and peer acceptance, 344 children were labeled as

neglected children (who lacked friends in class but were not disliked by their peers). Ninety-four were rejected children (who lacked friends in class and were actively disliked by many of their peers). The peer nomination measure (Pang, 1991) or its adaptation was administered in seven of the eight studies, in which individual children in a class were asked to nominate up to three classmates who they liked most (positive nomination) and three classmates who they liked least (negative nomination).

In summary, preschool children who had low peer sociometric status were more likely to be considered as “target children” who needed additional social-emotional support and then received explicit instruction focused on social-emotional competence. Furthermore, internalizing behaviors of preschool children, especially social withdrawal, was studied more widely than externalizing behaviors. Although the number of children with internalizing behaviors across the included studies was smaller than the number of children with externalizing behaviors, the number of studies involving children with internalizing behaviors ($n = 8$) was larger than the number of studies involving children with externalizing behaviors ($n = 2$). This finding was expected given the reported prevalence of internalizing versus externalizing behaviors reported in studies of Chinese children (Liu et al., 2011).

Adult participants. Across the 76 studies included in this review, only one study reported the sample size of instruction agents who delivered the social-emotional instruction to preschool children (i.e., Zhang & Zeng, 2016). Information regarding the age, level of education, and teaching experience of instruction agents were not specified in any included study. Seven studies reported the type of professional who provided training to the instruction agents. Researchers trained authentic instruction

agents (i.e., classroom teachers) to implement the social-emotional instruction in these seven studies. However, neither specific training (e.g., amount of training, training to criterion, model of training) nor qualifications (e.g., professional credentials, experience) required to implement the social-emotional instruction were specified.

In summary, consistent with findings from previous systematic reviews of instructional practices conducted in the United States (e.g., Goldstein, 2002; Snyder et al., 2015), detailed information about the attributes of study participants was not provided in the majority of included studies, especially for the individuals who implemented the social-emotional instruction.

Conditions under Which Social-Emotional Instruction Implemented

As shown in Table 2-1, 23 included studies (30.3%) explicitly reported the type of preschool in which study was conducted. In 21 studies, social-emotional instruction was implemented in public preschools, whereas two studies were conducted in both public and private preschools. Thirty-four public preschools and 10 private preschools were involved across these two studies.

Forty-eight studies (63.2%) reported the number of participating preschool classes and a total of 223 preschool classes were involved in these studies. The age group of the preschool classes was specified in 43 studies. Across these 43 studies, child participants were enrolled in 40 junior classes, 81 middle classes, 71 senior classes, and 4 pre-primary classes (attached to elementary schools). Five studies did not report the age group of the preschool classes.

Of all 76 studies included, social-emotional instruction was reported to be implemented in an inclusive preschool classroom in only one study (i.e., Yao & Mao,

2011). All other studies did not specify whether the setting was an inclusive or segregated classroom.

Forty-nine studies (64.5%) reported the group format of child participants (or instruction group size) to whom the social-emotional instruction was delivered. Eight studies described instruction was implemented with one target child from a preschool classroom. Individualized instruction targeting more than one target child from a classroom (up to 5 children) was reported in 4 studies. Instruction implemented with small groups of children ($\leq 50\%$ of the children in a classroom) was described in three studies. One study involved a large group of children in a classroom ($> 50\%$ of the children, but not all children in a classroom). The social-emotional instruction implemented at the classroom-wide level was described in 34 studies.

Fifty-two studies (68.4%) reported the city or province where the study was conducted. The majority of studies were conducted in big cities, such as municipalities and provincial capitals. According to the definitions of the four economic and geographic regions² of mainland China provided by the National Bureau of Statistics of China (2011), 33 studies were conducted in the eastern region, three in the central region, six in the western region, and 10 in the northeastern region. More than 60% of these studies came from five provinces or municipalities: Tianjin ($n = 9$), Liaoning ($n = 9$), Beijing ($n = 6$), Zhejiang ($n = 5$), and Guangdong ($n = 4$). Figure 2-5 shows the

² The eastern region includes the following 10 provinces and municipalities: Beijing, Tianjin, Hebei, Shanghai, Jiangsu, Zhejiang, Fujian, Shandong, Guangdong, and Hainan. The central region includes the following six provinces: Shanxi, Anhui, Jiangxi, Henan, Hubei, and Hunan. The western region includes the following 12 provinces and municipalities: Inner Mongolia, Guangxi, Chongqing, Sichuan, Guizhou, Yunnan, Tibet, Shaanxi, Gansu, Qinghai, Ningxia, and Xinjiang. The northeast region includes the following three provinces: Liaoning, Jilin, and Heilongjiang.

frequency distribution of the included studies across 31 administrative divisions of the PRC.

In summary, the social-emotional instruction was primarily implemented in public preschools in mainland China. Children were usually recruited from different age groups of preschool classes. The majority of studies were conducted in privileged urban communities in eastern China, especially where normal universities are located. Therefore, it is unknown whether the findings from the included studies were unique to these urban samples or could be generalized to all preschools and children in mainland China. Almost all the included studies did not specify the primary setting in which social-emotional instruction was implemented, such as inclusive or segregated classrooms. This finding might be related to the development of early childhood special education services in mainland China. Education agencies began to offer services to young children with disabilities in 2000 in either special preschool classrooms in special education schools or inclusive preschool classrooms in some demonstration projects (e.g., public preschool) (Zhang & Yang, 2011). However, both the number of demonstration projects and number of children with disabilities involved in these demonstration projects were very small (Hu & Yang, 2013). For example, Mao and Zou (2009) found only 46 children with disabilities were attending 18 demonstration inclusive preschools in Beijing.

Components of Social-Emotional Instruction

Although the results from the systematic review presented above provide information about the participants, contexts, and conditions under which social-emotional instruction were implemented, the analysis of the specific social-emotional teaching practices that have been empirically studied in Chinese preschools is the most

relevant part of the literature review for the present study. These social-emotional teaching practices are directly related to the construct that the SETP-C is designed to measure. The empirical evidence on social-emotional teaching practices supports the identification and selection of teaching practices included on the SETP-C.

What to teach. Based on the alignment analysis of TPOT items and social-emotional related domains of China's ELDG, 12 categories of instructional content were specified in this review. Four of these categories were labeled as the TPOT Key Practices items: TBE, TFR, TPS, and TEE, which were directly aligned with teaching practices as reflected on the TPOT. The other eight categories were not as directly aligned with teaching practices on the TPOT. The characteristics of social-emotional instruction by study are shown in Table 2-2.

Across 72 studies in which researchers reported the content of instruction, 34 studies addressed one category, 20 addressed two categories, 14 addressed three categories, and four addressed at least four categories. Researchers examined the influence of TFR in 40 studies, TIP in 20 studies, TUE in 18 studies, TSI in 12 studies, TSC in nine studies, TIA in eight studies, TPS in seven studies, TSR in six studies, TRU in six studies, TBE in five studies, TSA in five studies, and TEE in three studies. Table 2-3 shows the instructional content reported across different research designs.

Among the 34 studies in which the effect of a single category of instructional content was investigated, half of these studies examined the effect of TFR, seven examined TSI, four examined TIP, two examined TPS, two examined TSA, one examined TSR, and one examined TUE. Across the 20 studies examining the effect of the combination of any two instructional content categories, nine studies focused on the

combination of TUE and TFR, two on the combination of TRE and TIP, two on the combination of TFR and TPS, two on the combination of TSR and TSA, one on the combination of TUE and TIP, one on the combination of TUE and TPS, one on the combination of TIP and TIA, one on the combination of TSI and TIP, and one on the combination of TBE and TFR. Of the 14 studies in which the influence of three categories of instructional content were investigated, the combination of TIP, TIA, and TSC was addressed in three studies, and the combination of TBE, TSC, and TRE was addressed in three studies.

Compared with other instructional content categories, TFR occurred most often in the reviewed studies. TEE was least likely to be implemented across the studies included in this review. Both of these content categories are characterized as Key Practices items on the TPOT. The other two TPOT Key Practices items TPS and TBE were ranked 7th and 10th respectively in the frequency of implementation among 12 instructional content categories. Although TUE was described in 18 included studies, 11 out of the 18 studies examined the effect of teaching children to understand emotions along with one of the other instructional content categories (i.e., TFR, TIP, or TPS). In these studies, children were explicitly taught to comprehend others' feelings (or affective role taking) and vicariously match the emotional state or condition of others (i.e., empathy). Empathy³ has often been assumed to be the basis of much prosocial responding. Empathy serves as one of the critical factors driving and mediating prosocial actions (Eisenberge & Miller, 1987; Li & Yao, 2010; Yu & Liu, 2006). Given the important role of empathy in the development of prosocial behavior, it is not surprising

³ Empathy is usually defined as the ability to discern and vicariously experience the emotional state of another being in Chinese literature (Xiao, Zheng, & Chen, 2014).

that teaching children to understand emotions laid the foundation for teaching other social-emotional instructional content in many studies included in this review.

Five of the 76 reviewed studies (6.6%) reported implementing a named intervention or curriculum. The effect of the Chinese version of the Interpersonal Cognitive Problem-Solving program (Shure & Spivack, 1980) was examined in three studies, the Chinese version of the Social Skills Training and Facilitated Play program (Coplan et al., 2010) in one study, and the locally developed Social Skills Training Program for Young Children (Chen, 2000) [陈会昌的《幼儿社会化技能训练课程》] in one study.

When to teach. Activities in which the social-emotional instruction was implemented were grouped into five categories: teacher-directed activity, child-initiated activity, transition, routine, and outdoor activity. Instruction agents implemented the social-emotional instruction within only one activity in 44 studies, within two activities in 14 studies, and within three or more activities in four studies. Across these 62 studies, authors reported that social-emotional instruction was most often delivered in teacher-directed activities ($n = 25$), followed by child-initiated activities ($n = 19$), both teacher-directed activities and child-initiated activities ($n = 13$), all five categories of activities ($n = 3$), three categories of activities (i.e., teacher-directed activity, child-initiated activity, and routine; $n = 1$), and outdoor activity ($n = 1$).

How to teach. Forty of the 76 reviewed studies (52.6%) reported specific instructional procedures used to teach preschool children social-emotional competence. Seventeen studies reported implementing only one instructional procedure, seven studies reported implementing two instructional procedures, 11 studies reported

implementing three instructional procedures, and five studies reported implementing at least four instructional procedures. Based on the description of instructional procedures provided by the study authors, case discussion was used in 26 studies, role-playing in 19 studies, rehearsal in nine studies, praise in eight studies, peer modeling in seven studies, adult modeling in four studies, pairing-up in four studies, differential reinforcement in three studies, environmental arrangement in three studies, modeling (did not specify whether adult modeling or peer modeling) in two studies, and opportunities to respond in two studies.

How to evaluate. Fidelity of implementation. None of the 76 reviewed studies assessed or reported the extent to which the social-emotional instruction was implemented as intended.

Who is teaching. Forty-five of the 76 reviewed studies (59.2%) reported adult participants who delivered the social-emotional instruction. Based on the professional role of adult participants, as characterized by study authors, social-emotional instruction was implemented by regular classroom teachers in 38 studies, university researchers in four studies, and a team (including both classroom teacher and researcher) in three studies.

Dose. Sixty-four studies (84.2%) provided information about the dose of instruction. When a study reported a range for the frequency, duration, and intensity of instruction, the lower number was used to calculate the mean. The number of teaching episodes or sessions delivered to child participants per week was reported in 40 studies and ranged from once per week to every weekday ($M = 2.8$ teaching episodes per week). The total length of social-emotional instruction was reported in 62 studies and

ranged from 1 week to three academic years ($M = 10.9$ weeks). The duration of each teaching episode or session was reported in 32 studies and ranged from 13 minutes to 1 hour ($M = 33.8$ min). The cumulative dose in terms of total hours of instruction was able to be calculated in 26 studies, with a mean of 11.3 hours (range = 0.7 to 42.9 hours).

In summary, across the reviewed studies, social-emotional instruction occurred primarily in one or two classroom activities (i.e., the when to teach component). The instructional procedures used to teach the social-emotional content (i.e., the how to teach component) were not always explicitly described. In the studies reporting instructional procedures, case discussion, role-playing, modeling, rehearsal, and praise were more likely to be used to teach preschool children social-emotional competence. Perhaps this finding can be explained by the recommended strategies specified in the two landmark documents in the field of preschool education in mainland China where these instructional procedures were emphasized. Nevertheless, the instructional procedures used typically were not described sufficiently, which precludes a deeper understanding of the social-emotional instruction that occurred. An encouraging finding was that social-emotional instruction was implemented by “authentic” individuals who regularly interact with children in the preschool settings for the majority of studies that reported the “who is teaching” component. None of the studies included information about the how to evaluate fidelity component. Therefore, it is unclear whether the social-emotional instruction was implemented as intended.

Focus and Approaches to Teaching Children Social-Emotional Competence

As shown in Table 2-2, 51 of the 76 reviewed studies (67.1%) provided information about the focus of instruction. Universal practices were the focus of

instruction in 32 studies, secondary practices in nine studies, and tertiary practices in 10 studies. None of the studies were characterized as multi-tiered instruction or intervention.

Instruction agents can use more than one approach to teach preschool children social-emotional competence, and these approaches were not mutually exclusive. Instruction approach was reported in 64 studies (84.2%). Instructional agents used explicit lessons to teach children social-emotional competence in 23 studies and used eduplay in 19 studies. Instructional agents used both explicit lessons and eduplay to teach children social-emotional competence in 12 studies. All four approaches were used to teach children social-emotional competence in seven studies. Two studies used the explicit lessons, integration with other curricular domains, and infusion into daily routines to teach children social-emotional competence. Eduplay and infusion into daily routines were used in one study.

In summary, the social-emotional instruction was either targeted at all children in the classroom (classroom-wide), involved a small group of children who needed additional support, or was focused on individual children with persistent challenging behavior. None of the included studies described the implementation of tiered intervention/instruction designed to offer differentiated levels of support that provides the promise of meeting the needs of all children who range widely in their social-emotional competence, such as the *Pyramid Model*.

Besides explicit social-emotional lessons, instruction agents frequently used other approaches, especially eduplay, to teach preschool children social-emotional competence. Eduplay has been considered as a basic component of young children's

active learning and has become a developmentally appropriate teaching approach in Chinese preschools (Liu & Feng, 2005). Given the Chinese educational philosophy of teaching and learning through daily life in preschool (Liu & Feng, 2005), it was not unexpected that explicit lessons associated with curricular domains other than social and routine activities were also used to teach social-emotional competence when there was an appropriate teaching opportunity.

Delimitations and Limitations of the Literature Review

Although, to the student investigator's knowledge, this is among the first review of empirical literature on social-emotional instruction implemented in Chinese preschool programs, findings from the literature review should be interpreted in light of its limitations. First, the present review focused on social-emotional instruction implemented in preschools in mainland China. Studies focused on the implementation of social-emotional instruction/intervention in clinic-based settings, homes, or communities were not included. Second, studies included in this review were published in journals. It is unclear whether and how many of the studies would be considered peer-reviewed because of the difficulties and challenges in tracking peer-reviewed status in both Chinese electronic databases and Chinese journal websites. Third, this review limited the search to studies written in either Chinese or English. It is possible that studies conducted in mainland China were published in languages other than Chinese and English. Although the likelihood is low that many additional studies eligible for inclusion exist in other languages, it is possible that some studies were missed. The systematic search procedures that were used involving electronic and ancestral searches reduced the likelihood that relevant studies were not identified. Fourth, the rigor of the existing research and the strength of evidence for identified studies focused

on social-emotional instruction were not examined. Fifth, given time and resource issues, one rater coded all variables. Efforts should be made to enhance objectivity and accuracy in study selection and data extraction through double coding.

Summary

The purpose of this systematic review was to characterize descriptively the empirical literature focused on social-emotional instruction implemented in preschool programs in mainland China. This systematic review synthesized the knowledge accumulated over the last 30 years in 76 identified empirical studies on social-emotional instruction implemented in mainland Chinese preschools. Research on preschool social-emotional instruction has experienced significant growth over the past three decades in mainland China. This systematic review extends the literature by (a) synthesizing social-emotional instruction that has been empirically studied in mainland China, (b) examining key features and components of social-emotional instruction, and (c) identifying the social-emotional teaching practices in the empirical studies and evaluating how they aligned with the *Pyramid Model* and China's ELDG document.

The focus of this review was to identify and categorize teaching practices for promoting the social-emotional competence of preschool children that have been empirically studied in Chinese preschools. Although no published studies reviewed examined Chinese preschool teachers' use of the *Pyramid Model* practices or other multi-tiered interventions, results from the literature review support the alignment among social-emotional teaching practices that have been empirically studied in mainland China, with teaching practices as reflected on the TPOT, and social-emotional instructional content stipulated in China's ELDG document. The social-emotional teaching practices that have been identified from the review of the Chinese empirical

literature are clearly aligned with the TPOT items/indicators and social-emotional related goals in China's ELDG document. The social-emotional teaching practices identified from this review, items/indicators that appear on the TPOT, and the developmental goals associated with the social-emotional domain specified in China's ELDG document were the major sources that helped inform the development of survey content for the SETP-C.

Table 2-1. Characteristics of child participants and study settings across 76 included studies.

Article	Child Participant								Program		Preschool Class					PS	IG	
	N	Age	B	G	Dis.	CB	Risk	FI	N	Type	N	J	M	S	Mix			Pre
Single-Case Experimental Design Studies (n = 6)																		
Long (2008)	1	NR	1	0	NR	IB	Peer neglect	YES	1	NR	1	NR	NR	NR	NR	NR	NR	OT
Shang (2008)	1	4.0	0	1	NR	IB	NR	NR	1	Public	1	1	0	0	0	0	NR	OT
Sun (2008)	3	NR	NR	NR	NR	IB	NR	NR	NR	NR	NR	--	--	--	--	--	NR	TC
Yao & Mao (2011)	1	5.0	1	0	Autism	NR	NR	NR	1	Public	1	0	1	0	0	0	Inclusive	OT
Ye (2004)	1	5.0	1	0	NR	IB	NR	NR	NR	NR	NR	--	--	--	--	--	NR	NR
Ye (2006)	1	4.2	0	1	NR	IB	NR	NR	1	NR	1	0	1	0	0	0	NR	OT
Pre-Experimental Design Studies (n = 5)																		
Lin (1996)	60	NR	NR	NR	NR	NR	NR	NR	1	NR	2	0	1	1	0	0	NR	NR
Wang (2012)	32	NR	NR	NR	NR	NR	Peer neglect	NR	3	Public & private	NR	--	--	--	--	--	NR	NR
Xiao & Lin (2002)	35	4.9 to 5.8	NR	NR	NR	NR	NR	NR	1	NR	1	0	1	0	0	0	NR	WG
Zhang (1998a)	94	2.5 to 3.5	47	47	NR	NR	NR	NR	1	NR	NR	--	--	--	--	--	NR	NR
Zhou & Yang (1995)	89	3.5 to 6.5	NR	NR	NR	NR	NR	NR	1	NR	3	1	1	1	0	0	NR	WG
Quasi-Experimental Design Studies (n = 40)																		
Bi & Li (2014)	40	NR	20	20	NR	NR	NR	NR	1	Public	2	0	2	0	0	0	NR	NR
Chen (1996)	70	4.0 to 5.0	NR	NR	NR	NR	NR	NR	1	Public	2	0	2	0	0	0	NR	SG
Dan (2001)	360	3.0 to 6.0	180	180	NR	NR	NR	NR	2	NR	12	NR	NR	NR	NR	NR	NR	WG
Dan et al. (2005)	180	3.0 to 6.0	90	90	NR	NR	NR	NR	NR	NR	NR	--	--	--	--	--	NR	NR

Table 2-1. Continued

Article	Child Participant								Program		Preschool Class						PS	IG
	N	Age	B	G	Dis.	CB	Risk	FI	N	Type	N	J	M	S	Mix	Pre		
Dan et al. (2011)	165	3.0 to 6.0	NR	NR	NR	NR	NR	NR	NR	Public	NR	--	--	--	--	--	NR	NR
Feng & Wang (2012)	189	NR	NR	NR	NR	NR	Peer neglect	NR	4	NR	36	12	12	12	0	0	NR	TC
Guan et al. (2013)	60	5.0 to 6.0	NR	NR	NR	NR	NR	NR	1	Public	2	0	0	2	0	0	NR	WG
GZKTZ (1993)	58	NR	30	28	NR	NR	NR	NR	1	Public	2	0	0	2	0	0	NR	WG
Han et al. (2008)	203	4.5	NR	NR	NR	NR	NR	NR	2	NR	12	NR	NR	NR	NR	NR	NR	WG
Kai (2015)	83	4.0 to 5.0	40	43	NR	NR	NR	NR	1	Public	NR	--	--	--	--	--	NR	NR
Kang & Wang (1996)	NR	3.0 to 6.0	NR	NR	NR	NR	NR	NR	2	Public	6	2	2	2	0	0	NR	WG
Kong (2006)	20	NR	NR	NR	NR	NR	Peer neglect	NR	2	NR	4	0	4	0	0	0	NR	TC
Li (1995)	60	NR	NR	NR	NR	NR	NR	NR	1	Public	2	0	2	0	0	0	NR	WG
Li & Wang (1996)	60	5.0 to 6.0	NR	NR	NR	NR	NR	NR	1	Public	2	0	0	2	0	0	NR	WG
Li & Zhou (2010)	203	4.5	NR	NR	NR	NR	NR	NR	2	NR	12	NR	NR	NR	NR	NR	NR	WG
Li et al. (1994)	96	5.8	50	46	NR	NR	NR	NR	1	NR	4	0	2	2	0	0	NR	WG
Li et al. (2013)	108	5.8	NR	NR	NR	NR	NR	NR	1	NR	4	0	2	2	0	0	NR	WG
Li et al. (2016)	16	4.7	8	8	NR	IB	NR	NR	1	Public	4	0	0	0	0	4	NR	TC
Lin (2001)	NR	NR	NR	NR	NR	NR	NR	NR	8	NR	16	4	6	6	0	0	NR	WG
Liu (2012)	NR	NR	NR	NR	NR	NR	NR	NR	1	NR	6	2	2	2	0	0	NR	WG
Lu & Huo (2004)	80	4.5	40	40	NR	NR	NR	NR	1	Public	2	0	2	0	0	0	NR	WG

Table 2-1. Continued

Article	Child Participant								Program		Preschool Class					PS	IG	
	N	Age	B	G	Dis.	CB	Risk	FI	N	Type	N	J	M	S	Mix			Pre
Mou (2014)	120	4.0 to 6.0	62	58	NR	NR	NR	NR	1	NR	NR	--	--	--	--	--	NR	NR
Shen (2015)	160	5.1	NR	NR	NR	NR	NR	NR	NR	NR	8	0	4	4	0	0	NR	WG
Wang (1998)	72	NR	36	36	NR	NR	NR	NR	1	NR	3	0	3	0	0	0	NR	WG
Wang & Yang (2006)	711	4.6	NR	NR	NR	NR	NR	NR	3	NR	NR	--	--	--	--	--	NR	NR
Wang et al. (2000)	210	NR	NR	NR	NR	NR	NR	NR	1	NR	NR	--	--	--	--	--	NR	NR
Wu (2001)	1587	3.0 to 7.0	NR	NR	NR	NR	NR	NR	19	Public & private	NR	--	--	--	--	--	NR	NR
Xu (1994)	58	NR	NR	NR	NR	NR	NR	NR	1	NR	2	2	0	0	0	0	NR	WG
Yang (1998)	60	4.5 to 5.0	31	29	NR	NR	NR	NR	NR	NR	NR	--	--	--	--	--	NR	WG
Yang & Jin (2005)	320	NR	NR	NR	NR	NR	NR	NR	2	NR	12	4	4	4	0	0	NR	WG
Yang & Wang (2005)	140	5.0 to 5.5	70	70	NR	NR	NR	NR	2	NR	4	0	0	4	0	0	NR	WG
Yang et al. (2005)	333	4.4	NR	NR	NR	NR	NR	NR	2	NR	12	4	4	4	0	0	NR	WG
Yang et al. (2015)	76	5.0	NR	NR	NR	NR	NR	NR	1	Public	3	0	3	0	0	0	NR	WG
Zhang (1998b)	120	4.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	--	--	--	--	--	NR	NR
Zhang & Bai (2010)	155	5.2	81	74	NR	NR	NR	NR	2	NR	6	2	2	2	0	0	NR	WG
Zhang & Dai (1998)	120	4.5	NR	NR	NR	NR	NR	NR	NR	NR	NR	--	--	--	--	--	NR	NR
Zhang et al. (2006)	360	NR	180	180	NR	NR	NR	NR	2	NR	NR	--	--	--	--	--	NR	NR
Zhong (2014)	40	NR	NR	NR	NR	NR	NR	NR	2	NR	2	0	0	2	0	0	NR	NR

Table 2-1. Continued

Article	Child Participant								Program		Preschool Class						PS	IG
	N	Age	B	G	Dis.	CB	Risk	FI	N	Type	N	J	M	S	Mix	Pre		
Zhu (2015)	40	NR	NR	NR	NR	NR	NR	NR	1	Public	3	0	3	0	0	0	NR	WG
Zuo et al. (2012)	36	NR	26	10	NR	EB	NR	NR	1	NR	NR	--	--	--	--	--	NR	NR
Experimental Design Studies (<i>n</i> = 15)																		
Chen (1986)	34	5.3	22	12	NR	NR	NR	NR	1	NR	2	0	0	2	0	0	NR	LG
Chen et al. (1997)	40	5.8	20	20	NR	NR	NR	NR	1	NR	NR	--	--	--	--	--	NR	NR
Ju (1991)	40	NR	19	21	NR	NR	NR	NR	1	Public	1	0	0	1	0	0	NR	WG
Pang (1992)	60	4.0 to 6.0	30	30	NR	NR	Peer neglect	NR	4	NR	NR	--	--	--	--	--	NR	NR
Pang (1993)	60	4.0 to 6.0	30	30	NR	NR	Peer reject	NR	4	NR	NR	--	--	--	--	--	NR	NR
Quan & Ma (2014)	69	4.0 to 6.0	37	32	NR	NR	NR	NR	1	NR	NR	--	--	--	--	--	NR	NR
Quan et al. (2014)	69	5.7	37	32	NR	NR	NR	NR	1	NR	2	0	1	1	0	0	NR	WG
Sui et al. (2010)	253	4.0 to 6.0	133	120	NR	NR	NR	NR	1	NR	4	0	2	2	0	0	NR	WG
Sun et al. (2015)	50	4.0	25	25	NR	NR	NR	NR	1	NR	NR	--	--	--	--	--	NR	NR
Tan et al. (1999)	80	NR	NR	NR	NR	NR	NR	NR	1	Public	NR	--	--	--	--	--	NR	NR
Wang et al. (2000)	75	5.0	NR	NR	NR	NR	Peer reject & neglect	NR	2	NR	6	2	2	2	0	0	NR	SG
Wang & Yang (2001)	96	NR	NR	NR	NR	NR	NR	NR	1	NR	>2	NR	NR	NR	NR	NR	NR	WG
Wei & Li (2001)	42	5.0	NR	NR	NR	NR	NR	NR	1	NR	3	0	3	0	0	0	NR	NR
Zhang et al. (2010)	317	NR	NR	NR	NR	NR	NR	NR	2	NR	12	4	4	4	0	0	NR	WG

Table 2-1. Continued

Article	Child Participant								Program		Preschool Class					PS	IG		
	N	Age	B	G	Dis.	CB	Risk	FI	N	Type	N	J	M	S	Mix			Pre	
Zhao et al. (2011)	60	5.6	NR	NR	NR	NR	NR	NR	NR	1	NR	2	0	0	2	0	0	NR	NR
Explanatory Case Design Studies (n = 10)																			
Kang & Liu (2014)	1	4.0	0	1	NR	EB	NR	NR	NR	1	Public	1	NR	NR	NR	NR	NR	NR	OT
Li (1994)	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	--	--	--	--	--	NR	NR
Lu et al. (1987)	32	NR	NR	NR	NR	NR	NR	NR	NR	1	Public	NR	--	--	--	--	--	NR	NR
Mei (2006)	1	NR	1	0	NR	EB	Single parent	NR	NR	NR	NR	NR	--	--	--	--	--	NR	OT
Wang & Zhang (2004)	NR	NR	NR	NR	NR	NR	NR	NR	NR	1	NR	2	0	2	0	0	0	NR	WG
Xie (2011)	1	3.0	1	0	NR	IB	NR	NR	NR	1	NR	1	NR	NR	NR	NR	NR	NR	OT
Xu (2004)	NR	NR	NR	NR	NR	NR	NR	NR	NR	1	Public	2	0	0	2	0	0	NR	WG
Xu (2013)	1	5.3	1	0	NR	IB	NR	NR	NR	1	NR	1	0	0	1	0	0	NR	OT
Zhang & Zeng (2016)	NR	NR	NR	NR	NR	NR	NR	NR	NR	1	NR	1	0	1	0	0	0	NR	WG
Zhu & Hu (2004)	NR	NR	NR	NR	NR	NR	NR	NR	NR	2	Public	NR	--	--	--	--	--	NR	WG

Note: n = number of studies included; N = sample size; B = number of male participants (boys); G = number of female participants (girls); Dis. = disability; CB = challenging behavior; Risk = child risk factors; FI = family income; PS = primary setting; IG = format of instructional group; NR = not reported; Yes = reported.

Challenging behavior: IB = internalizing behaviors, EB = externalizing behaviors.

Preschool class: J = junior class (3- to 4-year olds), M = middle class (4- to 5-year olds), S = senior class (5- to 6-year olds), Mix = mixed-age class, Pre = pre-primary class.

Format of Instructional Group: OT = one target child, TC = target children, SG = small group, LG = large group, WG = whole group, P = program-wide.

Table 2-2. Components and features of social-emotional instruction across 76 included studies.

Article	Component of Instruction					Dose of Instruction				Focus	Instruction Approach
	What to Teach	When to Teach	How to Teach	How to evaluate	Who is teaching	Frequency (per week)	Duration (wks)	Intensity (min)	Cumulative (hrs)		
Single-Case Experimental Design Studies (<i>n</i> = 6)											
Long (2008)	TIP	CI	NR	NR	Team	NR	12.0	NR	NR	Tertiary	Eduplay
Shang (2008)	TFR	CI	NR	NR	Researcher	5	4.0	30	10.0	Tertiary	Eduplay
Sun (2008)	TIP	CI	NR	NR	NR	5	3.0 to 7.0	30	7.5 to 17.5	Tertiary	Eduplay
Yao & Mao (2011)	TIP, TIA	CI	NR	NR	Researcher	1 to 2	NR	30	7.0	Tertiary	Eduplay
Ye (2004)	TIP, TIA, & TSI	TD	NR	NR	Teacher	5	6.0	20	9.7	Tertiary	Eduplay
Ye (2006)	TIP	OA	PM & P	NR	Teacher	5	8.0 to 10.0	30	20.0 to 25.0	Tertiary	Eduplay
Pre-Experimental Design Studies (<i>n</i> = 5)											
Lin (1996)	TFR	TD & CI	NR	NR	Teacher	NR	NR	NR	NR	NR	EL & Eduplay
Wang (2012)	TIP	CI	NR	NR	NR	NR	NR	NR	NR	Secondary	Eduplay
Xiao & Lin (2002)	TPS	NR	NR	NR	Teacher	NR	NR	NR	NR	Universal	EL, IC, IR, & Eduplay
Zhang (1998a)	TFR, TIP, & TIA	TD & CI	PM, AM, PU, EA, CD	NR	Teacher	NR	20.0 to 25.0	NR	NR	NR	EL, IC, IR, & Eduplay
Zhou & Yang (1995)	TFR	NR	CD, PM & DR	NR	NR	NR	NR	NR	NR	Universal	NR
Quasi-Experimental Design Studies (<i>n</i> = 40)											
Bi & Li (2014)	TSI	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chen (1996)	TPS (ICPS)	TD	CD	NR	NR	3	8.0	40	16.0	Secondary	EL
Dan (2001)	TBE, TSC, TRE	CI	NR	NR	NR	2	25.7	25 to 35	21.4 to 30.0	Universal	Eduplay
Dan et al. (2005)	TBE, TSC, TRE	CI	NR	NR	NR	NR	1 year	NR	NR	NR	Eduplay

Table 2-2. Continued

Article	Component of Instruction					Dose of Instruction				Focus	Instruction Approach
	What to Teach	When to Teach	How to Teach	How to evaluate	Who is teaching	Frequency (per week)	Duration (wks)	Intensity (min)	Cumulative (hrs)		
Dan et al. (2011)	TSI & TIP	CI	NR	NR	Teacher	2	16.0	40	21.3	NR	Eduplay
Feng & Wang (2012)	TSI	CI	RP	NR	Teacher	2	1 semester	20 to 30	NR	Secondary	Eduplay
Guan et al. (2013)	NR	CI	NR	NR	Teacher	3	4.3	30	6.5	Universal	Eduplay
GZKTZ (1993)	TSA	TD, CI, TR, R, & OA	NR	NR	Teacher	NR	34.3	NR	NR	Universal	EL, IC, IR, & Eduplay
Han et al. (2008)	TUE	TD	CD, M, & RP	NR	Teacher	2	12.0	30	12.0	Universal	EL
Kai (2015)	TSI	TD	NR	NR	NR	1	1 semester	45	NR	NR	EL
Kang & Wang (1996)	TSA	TD, CI, TR, R, & OA	NR	NR	Teacher	NR	42.9	NR	NR	Universal	EL, IC, IR, & Eduplay
Kong (2006)	TUE & TIP	TD & CI	CD, AM, RP, P, & RE	NR	Teacher	NR	1 semester	NR	NR	Secondary	EL & Eduplay
Li (1995)	TFR	TD	M	NR	NR	NR	25.7	NR	NR	Universal	NR
Li & Wang (1996)	TFR	TD	RP	NR	NR	NR	8.6	NR	NR	Universal	EL
Li & Zhou (2010)	TFR & TUE	TD	CD, AM, & RP	NR	Teacher	2	12.0	30	12.0	Universal	EL
Li et al. (1994)	TFR & TUE	TD	CD, RP & RE	NR	Teacher	3	2.0	Half day	NR	Universal	EL
Li et al. (2013)	TFR & TUE (SST-FP)	TD	NR	NR	NR	2	4.0	NR	NR	Universal	EL
Li et al. (2016)	TIP, TEE, TUE, & TRE	TD & CI	AM, OTR, & P	NR	Researcher	2	7.0	60	14.0	Secondary	EL & Eduplay
Lin (2001)	TSR	TD, CI, TR, R, & OA	EA	NR	Teacher	NR	3 years	NR	NR	Universal	EL, IC, IR, & Eduplay
Liu (2012)	NR	NR	NR	NR	Teacher	NR	NR	NR	NR	Universal	NR

Table 2-2. Continued

Article	What to Teach	Component of Instruction				Dose of Instruction				Focus	Instruction Approach
		When to Teach	How to Teach	How to evaluate	Who is teaching	Frequency (per week)	Duration (wks)	Intensity (min)	Cumulative (hrs)		
Lu & Huo (2004)	TFR & TPS (SSTP)	TD & R	NR	NR	NR	2	12.9	NR	NR	Universal	EL, IC, & IR
Mou (2014)	TFR & TUE	TD & CI	CD, RE, & RP	NR	Teacher	NR	4.0	NR	NR	NR	EL & Eduplay
Shen (2015)	TFR	NR	CD, RP & RE	NR	NR	3	6.0	NR	NR	Universal	NR
Wang (1998)	TBE & TFR	TD	CD (TV)	NR	Teacher	5	1.0	NR	NR	Universal	EL
	TBE & TFR	TD	CD (Story)	NR	Teacher	5	1.0	NR	NR	Universal	EL
	TBE & TFR	TD	CD (Pic.)	NR	Teacher	5	1.0	NR	NR	Universal	EL
Wang & Yang (2006)	TSI	TD	NR	NR	Teacher	2	NR	20 to 30	NR	NR	EL
Wang et al. (2000)	TFR, TSC, & TSI	TD	NR	NR	NR	NR	NR	NR	NR	NR	EL
Wu (2001)	NR	NR	NR	NR	NR	NR	3 year	NR	NR	NR	NR
Xu (1994)	TSA & TSR	NR	NR	NR	Teacher	NR	10 months	NR	NR	Universal	EL, IC, IR, & Eduplay
Yang (1998)	TFR	CI	PM & RP	NR	Teacher	1	42.9	60	42.9	Universal	Eduplay
Yang & Jin (2005)	TSR & TSA	TD	NR	NR	NR	2	1 semester	20 to 30	NR	Universal	EL
Yang & Wang (2005)	TSI, TFR, & TSR	TD & CI	NR	NR	Teacher	NR	25.7	NR	NR	Universal	EL & Eduplay
Yang et al. (2005)	TUE & TFR	NR	NR	NR	NR	2	15.0	20 to 30	10.0 to 15.0	Universal	NR
Yang et al. (2015)	TFR	TD	CD, RE, & EA	NR	Teacher	1	8.0	30	4.0	Universal	EL, IC, & IR
Zhang (1998b)	TFR	NR	CD, RE, & RP	NR	Teacher	3	3.0	60	9.0	NR	NR
	TFR	NR	PM & DR	NR	Teacher	3	3.0	60	9.0	NR	NR
Zhang & Bai (2010)	TFR	CI	NR	NR	NR	2	4.0	30	4.0	Universal	Eduplay

Table 2-2. Continued

Article	Component of Instruction					Dose of Instruction				Focus	Instruction Approach
	What to Teach	When to Teach	How to Teach	How to evaluate	Who is teaching	Frequency (per week)	Duration (wks)	Intensity (min)	Cumulative (hrs)		
Zhang & Dai (1998)	TFR & TUE	NR	CD & RP	NR	Teacher	3	3.0	60	9.0	NR	EL
Zhang et al. (2006)	TSI	CI	NR	NR	Teacher	NR	1 year	NR	NR	NR	Eduplay & IR
Zhong (2014)	TEE, TUE, & TRE	TD	CD & RP	NR	NR	1	1 semester	40	NR	NR	EL
Zhu (2015)	TFR	CI	RP	NR	Teacher	2	6.0	20	4.0	Universal	Eduplay
Zuo et al. (2012)	TFR	TD	CD	NR	Teacher	5	2.0	20	3.3	NR	EL
Experimental Design Studies (<i>n</i> =15)											
Chen (1986)	TFR	TD	CD	NR	NR	5	1.0	NR	NR	Secondary	EL
	TFR	TD	PM & DR	NR	Researcher	5	1.0	NR	NR	Secondary	EL
Chen et al. (1997)	TFR & TPS	TD	CD	NR	Teacher	8	2.0	15	4.0	NR	EL
Ju (1991)	TFR & TUE	TD	CD, OTR, RE, & RP	NR	NR	3	4.0	60	12.0	Universal	EL
Pang (1992)	TFR & TIP	TD & CI	CD, RP, & P	NR	Team	NR	8.0	NR	NR	Secondary	EL & Eduplay
Pang (1993)	TFR & TIP	TD & CI	CD, RP, RE, & P	NR	Team	NR	8.0	NR	NR	Secondary	EL & Eduplay
Quan & Ma (2014)	TFR	CI	NR	NR	Teacher	NR	10.0	NR	NR	NR	Eduplay
Quan et al. (2014)	TFR	CI	NR	NR	NR	NR	10.0	NR	NR	Universal	Eduplay
Sui et al. (2010)	TUE & TPS (ICPS)	TD	CD	NR	NR	5	5.0	20	8.0	Universal	EL
Sun et al. (2015)	TBE, TSC, & TRE	CI	NR	NR	Teacher	1 to 2	1 semester	40	13.3	NR	Eduplay
Tan et al. (1999)	TFR, TIP, TIA, TSC, TSR, TSA, & TUE	TD	CD, RP, & RE	NR	NR	NR	38.6	NR	NR	NR	EL

Table 2-2. Continued

Article	Component of Instruction					Dose of Instruction				Focus	Instruction Approach
	What to Teach	When to Teach	How to Teach	How to evaluate	Who is teaching	Frequency (per week)	Duration (wks)	Intensity (min)	Cumulative (hrs)		
Wang et al. (2000)	TIP & TFR	TD & CI	PM	NR	NR	2	10.0	NR	NR	Secondary	EL & Eduplay
	TIP, TFR, & TPS (ICPS)	TD & CI	CD & RP	NR	NR	2	10.0	NR	NR	Secondary	EL & Eduplay
	TIP, TFR, & TUE	TD & CI	CD & RE	NR	NR	2	10.0	NR	NR	Secondary	EL & Eduplay
Wang & Yang (2001)	TIP, TIA, TFR, TBE, TPS, TSR, TSI, & TSC	TD & CI	NR	NR	NR	NR	3 year	NR	NR	Universal	EL & Eduplay
Wei & Li (2001)	TFR & TUE	TD	CD	NR	NR	3	4.3	60	12.9	NR	EL
	TFR & TUE	TD	CD & RP	NR	NR	3	4.3	60	12.9	NR	EL
Zhang et al. (2010)	TFR	TD	CD	NR	Teacher	2	4.0	NR	NR	Universal	EL
	TFR	CI	NR	NR	Teacher	2	4.0	30	4.0	Universal	Eduplay
	TFR	TD & CI	CD	NR	Teacher	2	4.0	NR	NR	Universal	EL & Eduplay
Zhao et al. (2011)	TFR	TD	NR	NR	NR	1	3.0	13 to 20	0.7 to 1.0	NR	EL
	TFR & TUE	TD	NR	NR	NR	1	3.0	13 to 20	0.7 to 1.0	NR	EL
Explanatory Case Design Studies ($n = 10$)											
Kang & Liu (2014)	TRE, TIP, & TFR	TD, CI, & R	PU & P	NR	Teacher	NR	1 semester	NR	NR	Tertiary	EL, IC, IR, & Eduplay
Li (1994)	TUE, TFR, & TIP	TD	CD	NR	NR	NR	2.0	NR	NR	NR	EL
Lu et al. (1987)	TSI	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Mei (2006)	TIP, TIA, & TSC	NR	P	NR	Teacher	NR	NR	NR	NR	Tertiary	NR
Wang & Zhang (2004)	TFR	TD & CI	PU	NR	NR	NR	13 months	NR	NR	Universal	EL & Eduplay

Table 2-2. Continued

Article	What to Teach	Component of Instruction				Dose of Instruction				Focus	Instruction Approach
		When to Teach	How to Teach	How to evaluate	Who is teaching	Frequency (per week)	Duration (wks)	Intensity (min)	Cumulative (hrs)		
Xie (2011)	TIP, TIA, & TSC	TD & CI	NR	NR	Teacher	NR	NR	NR	NR	Tertiary	EL & Eduplay
Xu (2004)	TSI	TD	PU	NR	NR	NR	13.0	NR	NR	Universal	EL
Xu (2013)	TIP, TIA, & TSC	CI	P	NR	Teacher	NR	NR	NR	NR	Tertiary	Eduplay
Zhang & Zeng (2016)	NR	NR	NR	NR	Teacher	2	12.9	NR	NR	Universal	NR
Zhu & Hu (2004)	TUE, TFR, & TEE	NR	CD	NR	Teacher	NR	NR	NR	NR	Universal	NR

Note: n = number of studies included; Frequency = number of teaching episodes per week; Duration = length of treatment (weeks); Intensity = amount of time within each teaching episode (minutes); Cumulative dose = frequency \times duration \times intensity; ICPS = Chinese version of the Interpersonal Cognitive Problem-Solving program (Shure & Spivack, 1980); SST-FP = Chinese version of the Social Skills Training and Facilitated Play program (Coplan et al., 2010); SSTP = Social Skills Training Program for Young Children (Chen, 2000).

What to Teach: TBE = teaching behavior expectations, TFR = teaching friendship skills, TPS = teaching social problem solving, TIP = teaching social interaction with peers, TIA = teaching social interaction with adults, TSI = teaching social independence, TSC = teaching social cooperation, TSR = teaching social responsibility, TSA = teaching social adjustment, TEE = teaching children to express emotions, TUE = teaching children to understand emotions, TRE = teaching children to regulate emotions.

When to Teach: TD = teacher-directed activity, CI = child-initiated activity, TR = transition, R = routine, OA = outdoor activity.

How to Teach: CD = case discussion, DR = differential reinforcement, PM = peer modeling, AM = adult modeling, M = modeling, OTR = opportunities to respond, P = praise, RP = role-playing, RE = rehearsal, EA = environmental arrangement, PU = pair-up.

Who is Teaching: Team = researcher + teacher.

Instruction Approach: EL = explicit social-emotional lessons, IC = integration with other curricular domains, IR = infusion into daily routines.

Table 2-3. Number of studies for instructional content categories by research design.

Research design	TBE	TFR	TPS	TIP	TIA	TSI	TSC	TSR	TSA	TEE	TUE	TRE
Single-case (<i>n</i> = 6)	0	1	0	5	2	1	0	0	0	0	0	0
Pre-experimental (<i>n</i> = 5)	0	3	1	2	1	0	0	0	0	0	0	0
Quasi-experimental (<i>n</i> = 40)	3	19	2	3	0	8	3	4	4	2	10	4
Experimental (<i>n</i> = 15)	2	13	4	5	2	1	3	2	1	0	6	1
Explanatory case study (<i>n</i> = 10)	0	4	0	5	3	2	3	0	0	1	2	1
Total	5	40	7	20	8	12	9	6	5	3	18	6

Note: *n* = number of studies included; TBE = teaching behavior expectations, TFR = teaching friendship skills, TPS = teaching social problem solving, TIP = teaching social interaction with peers, TIA = teaching social interaction with adults, TSI = teaching social independence, TSC = teaching social cooperation, TSR = teaching social responsibility, TSA = teaching social adjustment, TEE = teaching children to express emotions, TUE = teaching children to understand emotions, TRE = teaching children to regulate emotions.

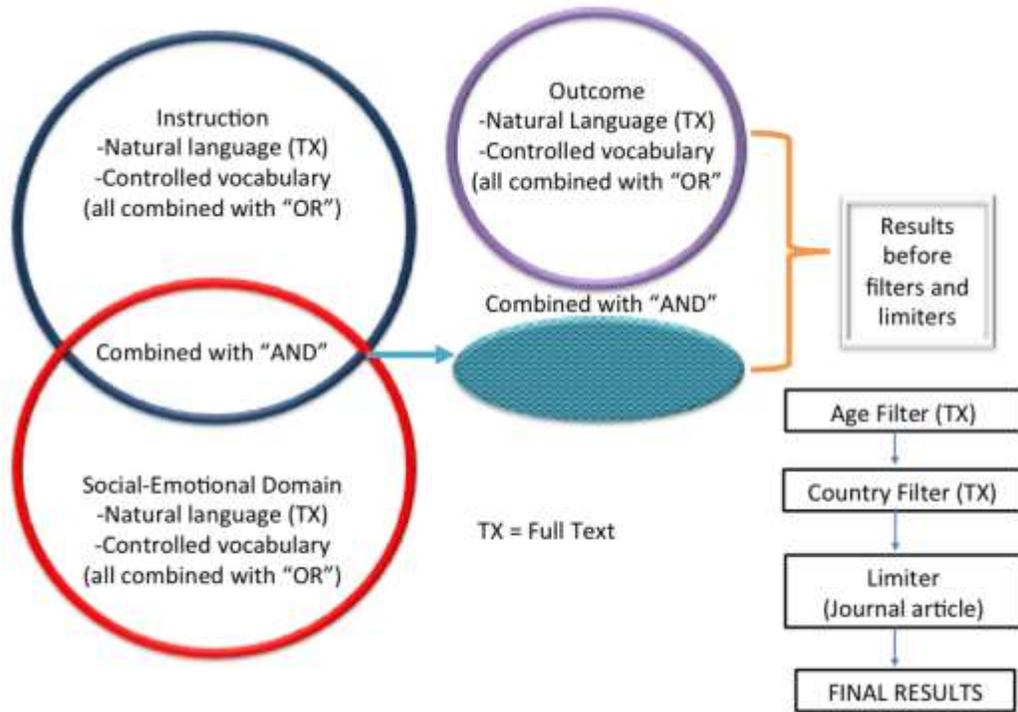


Figure 2-1. Illustration of search methods in electronic databases. Note: This figure was adapted from the DEC Evidence Synthesis Group (2016).

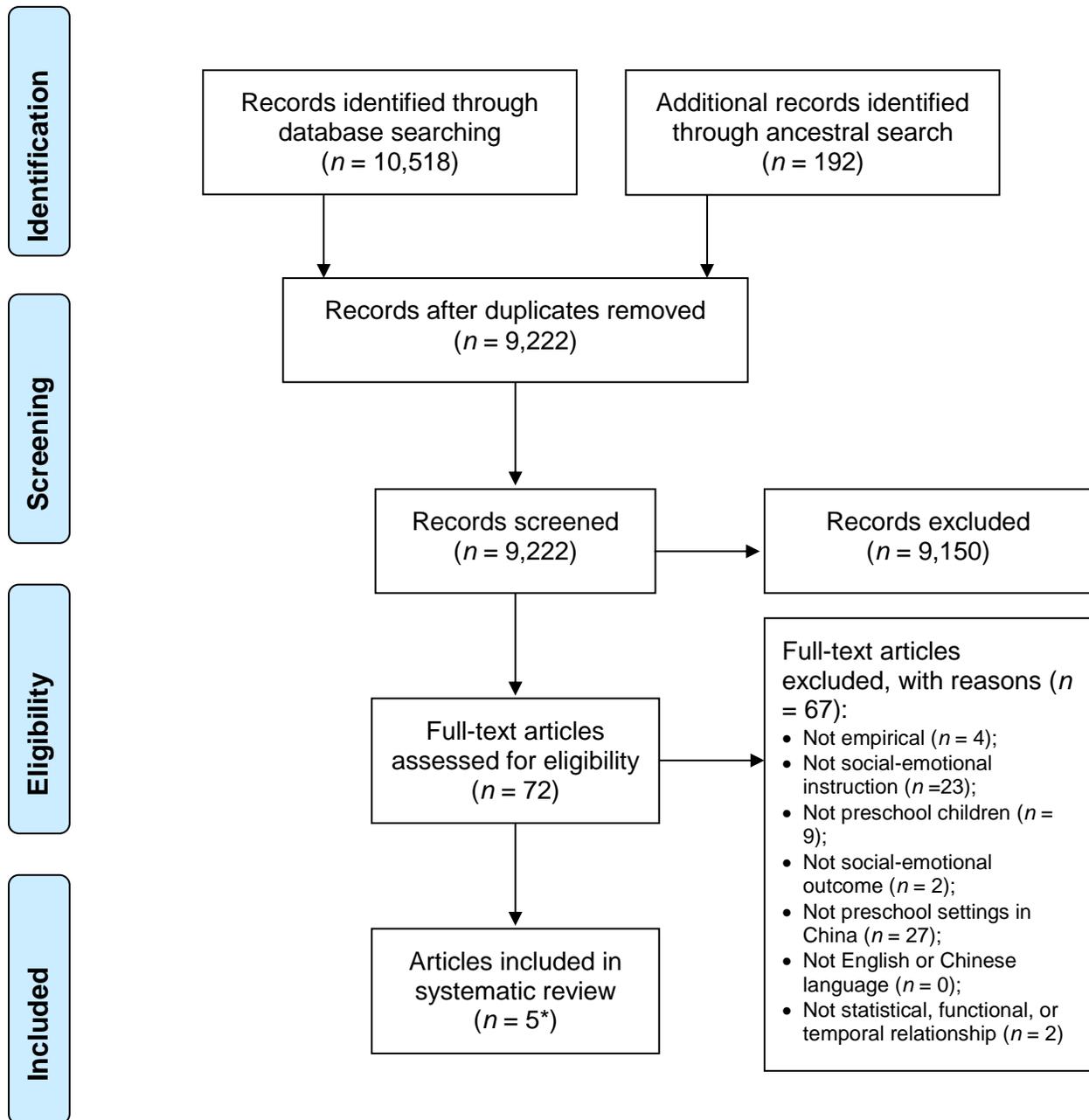


Figure 2-2. Study selection from the English databases (PRISMA flow diagram). Note: An asterisk indicates four articles were identified in both English and Chinese database searches.

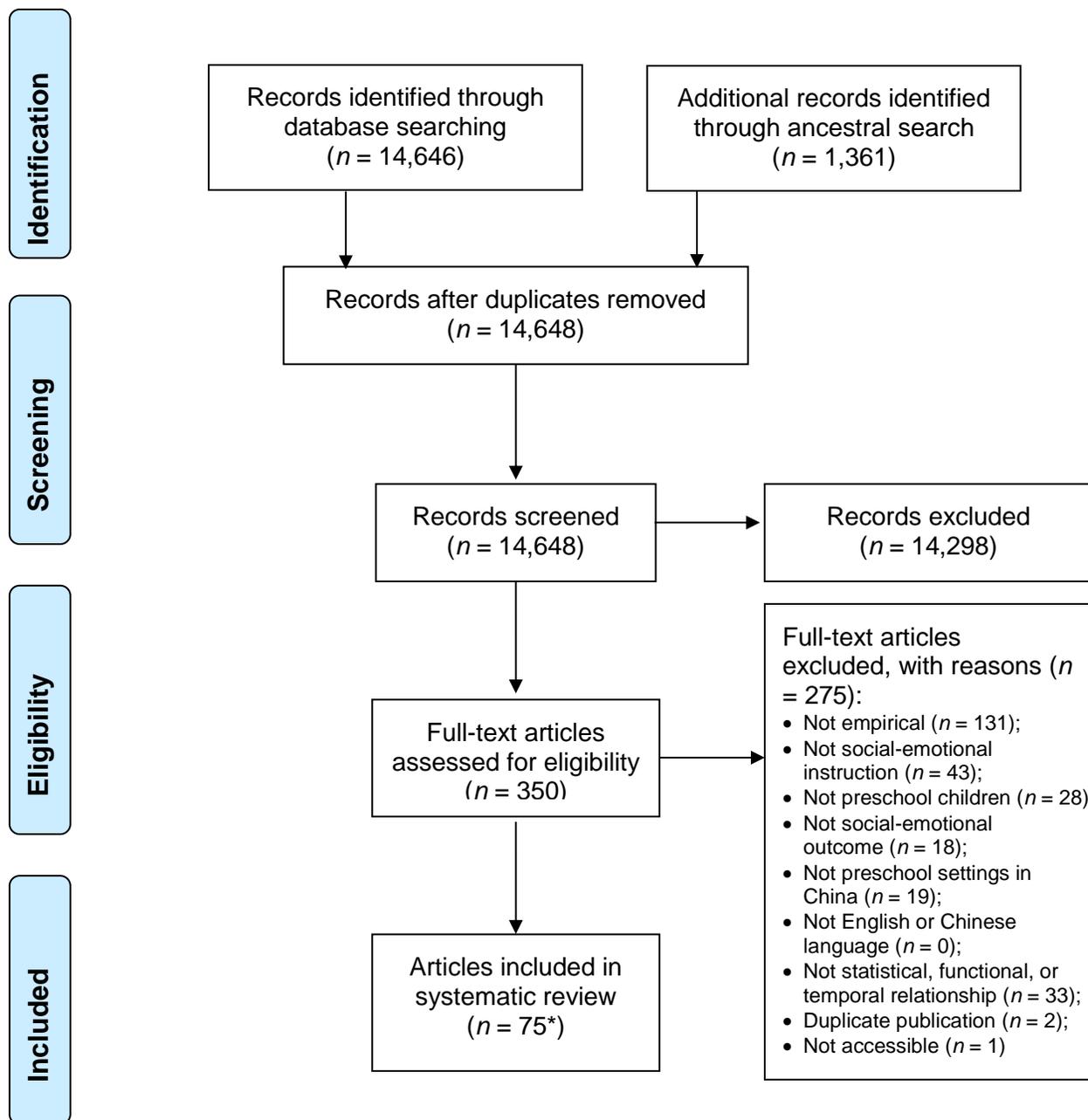


Figure 2-3. Study selection from the Chinese databases (PRISMA flow diagram). Note: An asterisk indicates four articles were identified in both English and Chinese database searches.

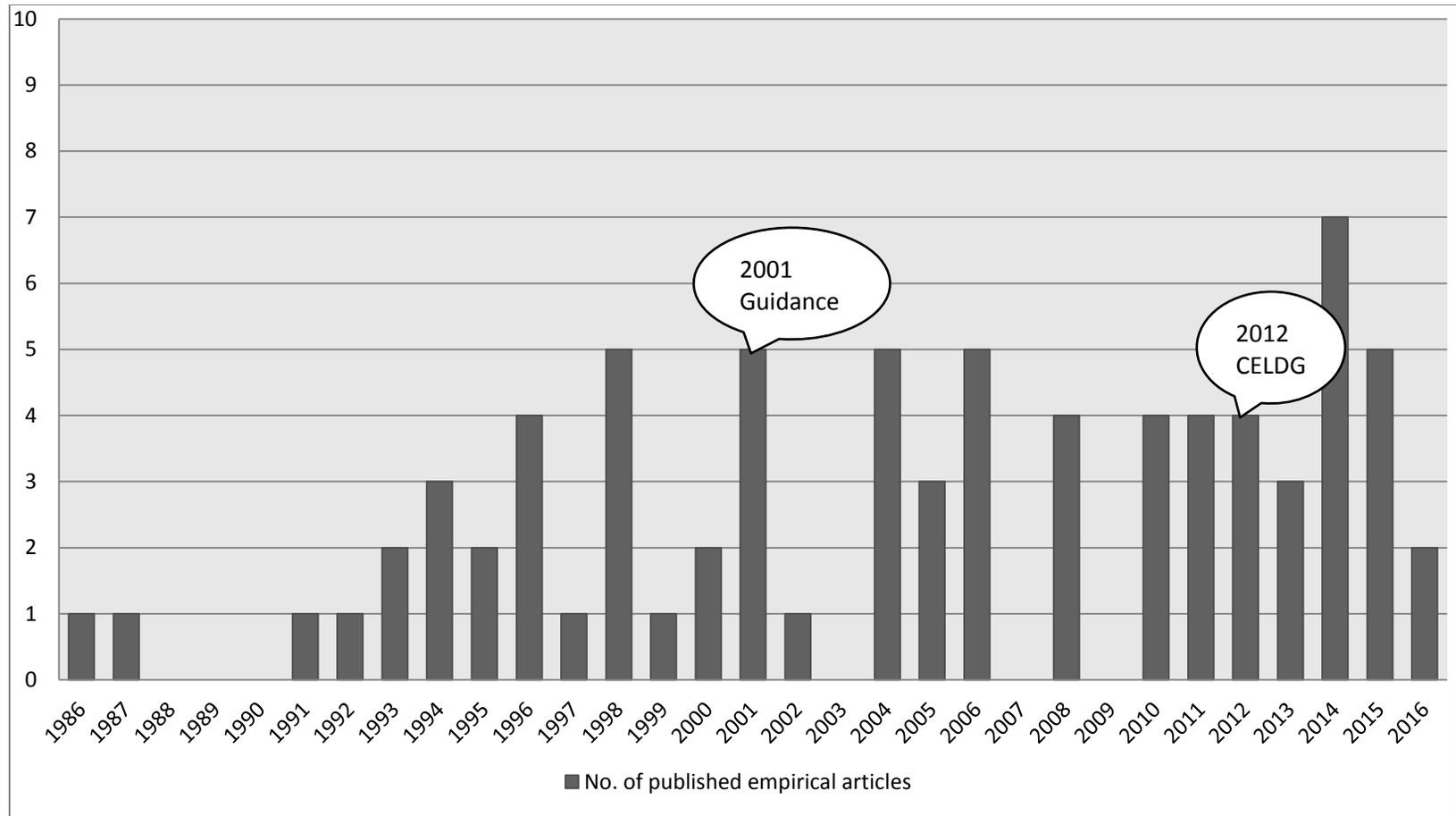


Figure 2-4. Number of empirical articles on social-emotional instruction in Chinese preschools published yearly.

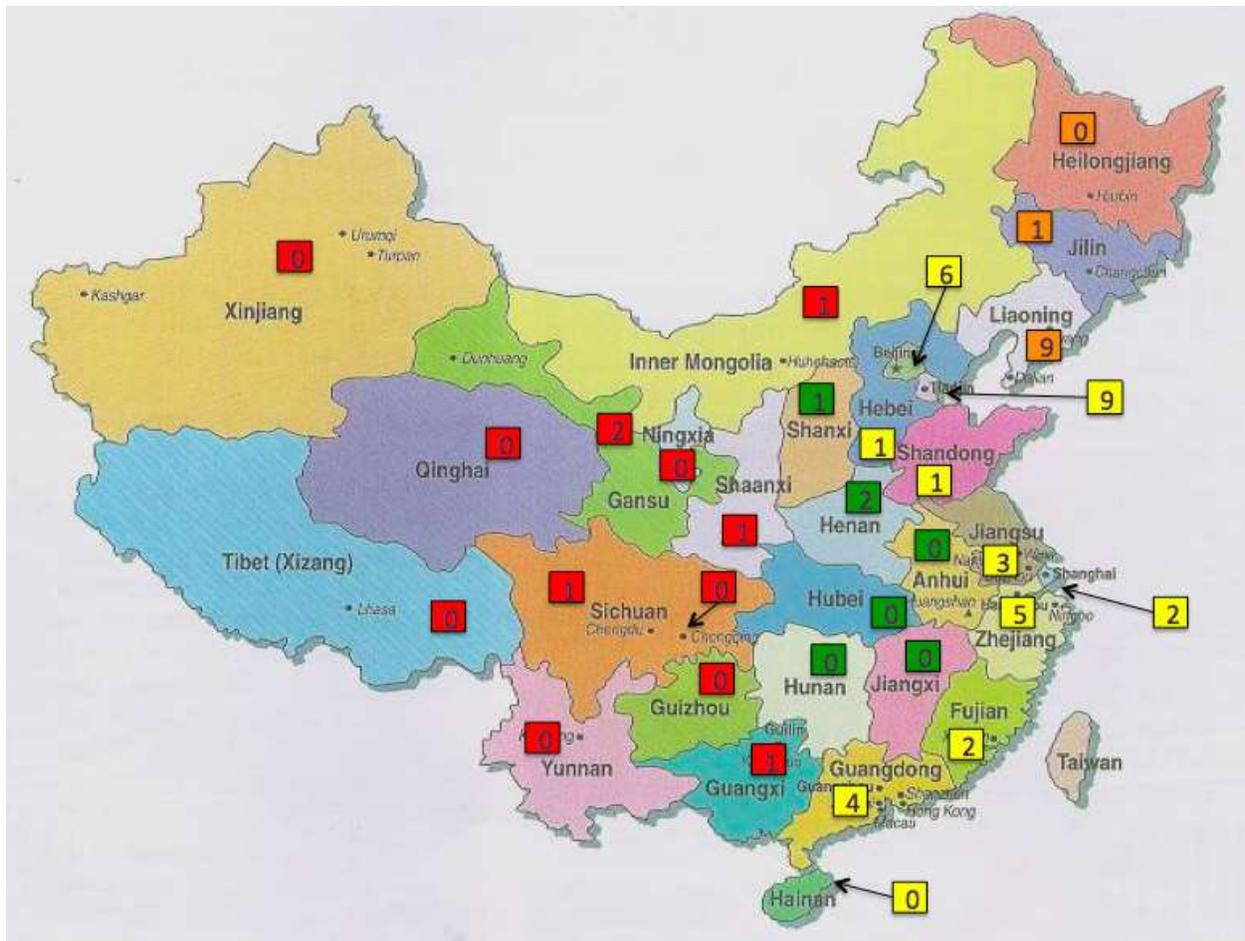


Figure 2-5. Number of reviewed studies conducted in eastern, middle, western, and northeast China. Note: Yellow squares represent eastern regions; green squares represent middle regions; red squares represent western regions; orange squares represent northeast regions.

CHAPTER 3 METHODOLOGY

The purposes of the present study were (a) to develop and validate the content of a culturally relevant questionnaire focused on preschool social, emotional, and behavioral teaching practices, (b) to gather preliminary structural validity and internal consistency score reliability evidence for the questionnaire using data obtained from Chinese preschool teachers, and (c) to use the questionnaire to examine Chinese preschool teachers' perspectives about social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two nationally recognized and influential Chinese early childhood learning standards documents. The questionnaire was titled the Social-Emotional Teaching Practices Questionnaire – China (SETP-C; Snyder & Luo, 2017). The SETP-C was developed and various sources of validity evidence were gathered using systematic and iterative quantitative and qualitative approaches before the collection of data for addressing the substantive research questions, particularly through the lenses of Chinese early childhood researchers, leaders, practitioners, and master's students in preservice training programs. The SETP-C was translated into Chinese (Simplified) and back-translated into English following recommended procedures and guidelines (Brislin, 1986; Guillemin et al., 1993). The development and validation process for the SETP-C is detailed below. The remainder of the chapter describes the research questions, research design, study setting, sampling strategy, demographic information about the participants, and data analytic procedures used to gather the perspectives of Chinese preschool teachers about their social, emotional, and behavioral teaching practices.

Development and Content Validation of the SETP-C

The SETP-C was designed as a self-report instrument to quantitatively measure Chinese preschool teachers' perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two nationally recognized and influential Chinese early childhood learning standards documents. Beginning in 2013, the development and validation of the SETP-C involved four phases: item generation and selection, initial validation and item reduction, external expert review, and wording and translation (Guillemin et al., 1993; Singh, Junnarkar, & Kaur, 2016). Each phase was conducted in a systematic and sequential way as described further below. Studies related to the development and validation of the SETP-C were approved by the University of Florida Institutional Review Board (#2013-U-0665 and IRB201601547).

Phase 1: Item Generation and Selection

With the subject-centered approach (Crocker & Algina, 1986; Torgerson, 1958), SETP-C scores were intended to locate Chinese preschool teachers at different points on two quantitative continua with respect to the construct of interest (i.e. “frequency of use” continuum, and “implementation confidence” continuum). The SETP-C scores were to be used to discriminate among Chinese preschool teachers over a range of their reported use of the teaching practices and their confidence about implementing these practices.

As the primary construct to be measured on the SETP-C, social, emotional, and behavioral teaching practices were defined as specific actions or behaviors of preschool teachers that involve manipulating the physical, temporal, interactional, or instructional environment to foster young children's social, emotional, and behavioral skills or

competencies (Snyder, Hemmeter, & Fox, 2015). Using the *Pyramid Model* as the conceptual framework for the SETP-C, the construct of social, emotional, and behavioral teaching practices was initially conceptualized as a composite of (a) universal teaching practices related to promoting nurturing and responsive relationships and high-quality supportive classroom environments; (b) targeted or explicit practices focused on teaching children social skills, emotional competencies, and positive behavior; and (c) individualized teaching practices that included the development, implementation, and evaluation of behavior support plans for children with the most persistent challenging behavior.

The development of the SETP-C began with the creation of items to measure the social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two Chinese national early childhood learning standards documents. The *Pyramid Model* provides a multi-tiered framework for organizing evidence-based practices for promoting social-emotional development and addressing challenging behavior in preschool children (Fox et al., 2010; Hemmeter et al., 2006). The Teaching Pyramid Observation Tool for Preschool Classrooms (TPOT; Hemmeter, Fox, & Snyder, 2014) is an assessment instrument designed to measure the fidelity of implementation of practices associated with the *Pyramid Model*. The TPOT contains 14 items. For each TPOT item, there are between 5 and 10 observable and measurable indicators reflecting social, emotional, and behavioral teaching practices that align with the *Pyramid Model*. Additional information about the TPOT is described in Chapter 1.

In mainland China, the *Guidance for Preschool Education – Trial Version (Guidance)* and China’s *Early Learning and Development Guidelines for Children 3-6*

Years Old (ELDG) are two nationally recognized, and the most influential, standards documents in early childhood education. Age appropriate goals for all children's development and learning and recommended teaching practices outlined in these Chinese landmark documents provide information about social, emotional, and behavioral teaching practices that are socio-culturally valued and expected to be implemented by teachers in mainland China. Several activities were conducted for generating and selecting items to measure the social emotional, and behavioral teaching practices associated with the *Pyramid Model* and two Chinese national early childhood learning standards documents.

Examining alignment

A crosswalk of the *Pyramid Model* practices as measured by the pre-publication version of the TPOT (TPOT-P; Fox, Hemmeter, & Snyder, 2008) with practices stipulated in China's *Guidance* and ELDG documents demonstrated strong alignment, which also strengthened the rationale for using the *Pyramid Model* as the conceptual framework to measure Chinese preschool teachers' implementation of social, emotional, and behavioral teaching practices. China's *Guidance* and ELDG documents were selected for comparison because they serve as the leading sources of teaching that describe the knowledge, skills, and competencies that mainland Chinese preschool teachers need and should perform in order to promote preschool children's optimal learning and development within the context of preschool programs (Li, 2012; Zhu, 2009). The crosswalk involved the student investigator comparing teaching practices across the different resources and indicating where they converged. The student investigator's major professor confirmed the student investigator's alignment and when discrepancies occurred, they were resolved through discussion and reaching consensus

about alignment. The alignment activity documented that the *Pyramid Model* practices were well-aligned with teaching practice specified in China's *Guidance* and ELDG documents. In addition, the alignment activity supported content-oriented validation evidence (American Educational Research Association [AERA], American Psychological Association [APA], & National Council on Measurement in Education [NCME], 2014).

Pilot study

A small pilot study was conducted to explore the extent to which a sample of Chinese preschool teachers was implementing the social, emotional, and behavioral teaching practices associated with the *Pyramid Model* (Luo et al., 2017). The TPOT-P (Fox, Hemmeter, & Snyder, 2008) was administered by the student investigator in 20 Chinese preschool classrooms in Beijing.

The TPOT-P contained a total of 139 indicators organized into three subscales: Key Practices, Red Flags, and Responses to Challenging Behavior. The TPOT-P was administered through a combination of a 2-hr observation of a preschool classroom and a 15- to 20-minute interview with the lead teacher. The TPOT-P observation was conducted during both teacher-directed and child-initiated activities, as well as the transitions between activities. With respect to scoring, indicators associated with the Key Practices were scored as 1 (*present*) or 0 (*not present*) or *no opportunity* (four indicators can be scored *no opportunity*). Seventeen Red Flags indicators and eight indicators associated with the Responses to Challenging Behavior subscale were rated as 1 (*present*) or 0 (*not present*) (Fox et al., 2008).

Following the administration of the TPOT-P, a 32-item self-report questionnaire was piloted with lead teachers in these same 20 preschool classrooms. The 32 items

were directly drawn from the TPOT-P, and each item was rated for its importance, frequency, and confidence (i.e., How Important section, How Often section, and How Confident section) on a 4-point Likert-type response scale, with a higher score reflecting a higher level of importance, frequency of use, and confidence in implementing a teaching practice item. This 32-item questionnaire was referred to as the pilot version of the SETP-C.

Each teaching practice indicator on the TPOT-P and each teaching practice item on the pilot version of the SETP-C were analyzed for item difficulty. Given the teaching practice indicators on the TPOT-P were dichotomously scored, the difficulty of a teaching practice indicator on the TPOT-P under classical test theory can be defined as the proportion of teachers who were given credit on that teaching practice indicator (Crocker & Algina, 1986). The difficulty of a teaching practice item on the pilot version of the SETP-C was equal to the mean of responses on that teaching practice item given it was polytomously scored. Tables 3-1 and 3-2 show the descriptive statistics (including item difficulty) for each teaching practice on the TPOT-P and on the pilot version of the SETP-C, respectively. Generally, teaching practices of medium difficulty were selected for further testing and inclusion on the next iteration of the SETP-C in an effort to maximize the variance of future respondents' scores.

Review of the Chinese empirical literature

To further identify items to be included on the next iteration of the SETP-C, a comprehensive and systematic review of the Chinese empirical literature on preschool social-emotional instruction (described in detail in Chapter 2) was conducted. The systematic review was intended to identify and summarize teaching practices for promoting social-emotional competence of preschool children that have been

empirically studied in Chinese preschool programs. Furthermore, an effort was made to review and pool items from published instruments that were designed to measure Chinese preschool teachers' social-emotional instruction. However, only one relevant instrument was identified (i.e., Ye, 2012).

Item pool for the revised SETP-C

Building on the activities described above, a comprehensive pool of 262 potential teaching practice items was generated. Specifically, 139 teaching practices/items were drawn from the TPOT-P (30 of which were designated as important to include from the pilot study), 45 from China's *Guidance*, 30 from China's ELDG, 31 from the literature review, and 17 from an existing self-report instrument (i.e., Ye, 2012).

Given the content of these potential items were all related to teaching practices for promoting social-emotional competence or addressing challenging behavior of preschool children, a significant number of overlapping items were present in the item pool. These 262 potential items were sorted according to the tier of *Pyramid Model* practices (i.e., universal tier, secondary tier, and tertiary tier) that they represented, with the intent to select key items from each tier classified in the conceptual framework of the SETP-C (i.e., *Pyramid Model*).

To avoid redundancy, similar or repetitive items were identified between and within each tier and then redundant items were removed, combined, or reworded. On the basis of the psychometric analyses of items using data collected during the pilot study and a thorough review of items by the student investigator and her major professor, a preliminary draft of the SETP-C to be used in the present study was created. This version of the SETP-C consisted of 89 preschool social, emotional, and behavioral teaching practice items, with each item scored three times (i.e., How

Important section, How Often section, and How Confident section) using a 6-point Likert-type response scale (1 = *not at all important/almost never/not at all confident*, 2 = *slightly important/very rarely/slightly confident*, 3 = *somewhat important/rarely/somewhat confident*, 4 = *moderately important/occasionally/moderately confident*, 5 = *very important/very frequently/very confident*, 6 = *extremely important/almost always/extremely confident*). With higher scores, the teacher rated the teaching practice item as more important, reported she/he used it more often, or that she/he was more confident in implementing the teaching practice. Demographic or attribute variables for the preschool and teacher/classroom were also included on this version of the SETP-C.

Based on the conceptualization of the construct that was intended to be measured, these 89 items were categorized to represent five domains of the social, emotional, and behavioral teaching practices construct, and each item was allocated to one of the five predefined domains by consensus opinion between the student investigator and her major professor. Twelve items were assigned to the domain of Building Nurturing and Responsive Relationships, 18 items to the domain of Creating a High-Quality Supportive Classroom Environment, 42 items to the domain of Instruction on Targeted Social or Emotional Skills, 11 items to the domain of Addressing Challenging Behavior, and six items to the domain of Supporting Family Use of Social, Emotional, and Behavioral Teaching Practices. As shown in Table 3-3, a table of specifications for this version of the SETP-C was produced to provide a guide for the development and allocation of items to domains.

Appendix B shows the five sources of each of the 89 teaching practice items included on the preliminary draft of the SETP-C and also indicates which teaching

practice item was included on the pilot version of the SETP-C. Teaching practice items related to Building Nurturing and Responsive Relationships, Creating a High-Quality Supportive Classroom Environment, and Supporting Family Use of Social, Emotional, and Behavioral Teaching Practices were primarily drawn from indicators/items on the TPOT-P and recommended teaching practices specified in China's *Guidance*.

Indicators/items that appeared on the TPOT-P, social-emotional development goals specified in China's ELDG, and the teaching practices identified from the systematic literature review described in Chapter 2 were the major sources for the teaching practice items related to Instruction on Targeted Social or Emotional Skills.

Across the 89 teaching practice items, 36 were solely derived from indicators on the TPOT-P, especially for the teaching practices related to Addressing Challenging Behavior. Thirteen additional teaching practice items were added to the preliminary draft of the SETP-C based on content from the two Chinese national early childhood learning standards documents, the systematic review of the Chinese empirical literature on preschool social-emotional instruction, or the instrument used in the Ye (2012) study. The remaining 40 teaching practice items were reflected in both the TPOT-P and any of the other four sources. Twenty-nine teaching practice items on this version of the SETP-C had been used previously in the pilot study conducted with 20 preschool teachers in Beijing, as shown in Appendix B. These 89 teaching practice items were moved on to further testing and were the primary focus of item reduction based on initial validation activities.

Phase 2: Initial Validation and Item Reduction

Validation in the present study refers to a broad process in which theoretical rationales and empirical evidence are accumulated to support the adequacy and

appropriateness of inferences and actions based on instrument scores for proposed uses (Messick, 1989). It is the interpretations of instrument scores for proposed uses that are evaluated, not the instrument itself. Various sources of evidence might be used in evaluating the validity of a proposed interpretation of instrument scores for a particular use (AERA, APA, & NCME, 2014).

In mainland China, preschool principals are early childhood professionals designated to assume administrative responsibility for the ongoing operation and supervision of preschools. In accordance with China's *Preschool Principal Qualifications* (Ministry of Education, 2015), Chinese preschool principals are identified as practice experts who play an important role in preschool curriculum decision-making and in providing support and guidance to preschool teachers about their instruction and interactions with children. To examine Chinese practice experts' perspectives about the importance and appropriateness of the teaching practices items included on the preliminary draft of the SETP-C, a content validation activity was conducted. Then, item reduction was conducted based on a combination of psychometric analyses of data obtained from Chinese practice experts and theoretical analyses of items.

Participants and measure

A total of 260 Chinese practice experts attending a series of training workshops at China's National Training Center for Preschool Principals (教育部幼儿园园长培训中心) in September, October, and November 2016 were invited to complete a content validation rating scale for SETP-C items. These Chinese practice experts came from 31 provinces, autonomous regions, and direct-controlled municipalities in mainland China, and had been recommended to attend training workshops by their Provincial

Department of Education as prominent preschool principals or highly experienced teachers. These Chinese practice experts were asked to rate (a) how important they believed the 89 teaching practice items included on the preliminary draft of the SETP-C were for Chinese preschool teachers to use in promoting social-emotional competence of young children and preventing or addressing their challenging behavior, and (b) to what extent the 89 teaching practices items included on the preliminary draft of the SETP-C were culturally relevant for use in Chinese preschool classrooms.

Each item was rated on a 6-point Likert-type response scale on the How Important section and the How Culturally Relevant sections respectively, where 1 indicated that the item was *not at all important/not at all relevant* and 6 indicated that the item was *extremely important/extremely relevant*. The content validation rating scale was initially written in English (see Appendix C), and then was translated into Chinese (Simplified) by two translators independently. Their translations were compared and contrasted by two blind judges in order to choose a better version of translation for each paragraph and teaching practice item included on the content validation rating scale. Then, this process was confirmed by a fifth person. Appendix D shows the Chinese version of the content validation rating scale. The content validation rating scale was reverse translated into English by a group of three doctoral and master's students at the University of Florida who were fluent writers and speakers of Chinese (Mandarin) to verify the accuracy of the translation.

The student investigator visited China's National Training Center for Preschool Principals in the city of Changchun three times in 2016 and presented at the training workshops to explain this portion of the research project to three cohorts of trainees

(who were Chinese practice experts) and invited them to complete the content validation rating scale. The response rate was 83.2% ($N = 213$). However, data from eight practice experts were not included in the analysis due to incomplete responses. Therefore, the final sample size was 205. Table 3-4 shows demographic characteristics of participating Chinese practice experts. These practice experts were from 205 different preschools in mainland China and they identified themselves as either preschool principals ($n = 148, 73.6\%$), vice principals ($n = 39, 19.4\%$), or teachers ($n = 14, 7.0\%$). About 84% of these Chinese practice experts reported holding a bachelor's or higher degree. Their average number of years of professional experience in preschool settings was 17.1 years, with a range from 0.1 to 47 years.

Data analytic procedures

Internal consistency score reliability as measured by Cronbach's alpha using the data collected from 205 Chinese practice experts was calculated. Item analyses were conducted to examine mean (i.e., item difficulty), standard deviation, variance, and item discrimination for each item. Using the item as the unit of analysis, the correlation pattern of item scores between the How Important section and the How Culturally Relevant section was examined. Items were ranked based on mean scores of items to identify the 15 lowest-ranking items on the How Important section and the How Culturally Relevant section, respectively. These lowest-ranking items were items rated as being less important or less cultural relevant when compared to the remaining items. Item discrimination refers to the ability of an item to differentiate individuals on the construct purportedly measured, and in classical test theory, it usually is quantified as a correlation between the item responses and the total instrument scores (Crocker & Algina, 1986). Items with corrected item-total correlation below .20 were classified as

“poor-performing” items and were considered for elimination or complete revision (Nunnally & Bernstein, 1994). The proportion of the study sample falling into each of the six response categories was also calculated and missing data rates were computed for each item. Tables 3-5 and 3-6 show the descriptive statistics and score distributions on the How Important section and the How Culturally Relevant section for the 89 items.

A principal components analysis was recommended for item reduction (Hinkin, 1998). Principal components analyses were performed to investigate the underlying structure of the 89-item content validation rating scale using the data from the How Important section and the How Culturally Relevant section, respectively. To achieve parsimony and simple structure and to facilitate interpretation, the components were rotated to orthogonal structure using varimax rotation. In this technique, every factor was treated as independent of all others and the dispersion of the item-to-component coefficients (i.e., loadings) were maximized by maximizing the number of large and small loadings (Richman, 1986). In this part of the present study, the objective of principal components analyses was to identify items that most clearly represented the content domain of the underlying construct. Items correlated less than $.60$ with any rotated component were subject to further inspection.

Item reduction procedures

The student investigator and her major professor reviewed the results of the statistical analysis and selected items on the basis of a combination of statistical evidence and clinical considerations. First, the correlation of item scores between the How Important section and the How Culturally Relevant section (see Figures 3-1 and 3-2) indicated a relatively clear pattern other than for Item 17, which was standing out and was subsequently deleted as an outlier. In general, all items were considered, on

average, high on both the How Important section and the How Culturally Relevant section; and the higher rating on the How Important section, the higher rating on the How Culturally Relevant section. Second, 13 items (i.e., Items 9, 13, 17, 18, 19, 21, 28, 35, 38, 42, 43, 63, and 71) were removed because one of the following statistical criteria was met: (a) items with missing data rate higher than 5% on either the How Important section or the How Culturally Relevant section were eliminated, (b) items with corrected item-total correlations below .20 on either the How Important section or the How Culturally Relevant section were removed, (c) items among the 15 lowest-ranking items on both the How Important section and the How Culturally Relevant section were removed, (d) items among the 15 lowest-ranking items and with an item-to-component coefficient smaller than /.60/ on any rotated component on the How Important section were omitted, or (e) items among the 15 lowest-ranking items and with an item-to-component coefficient smaller than /.60/ on any rotated component on the How Culturally Relevant section were removed. These cut-off points have been established based on a number of previous validation studies (e.g., Boyes, Girgis, & Lecathelinais, 2009; McHorney et al., 2000). Third, a judgmental approach geared toward minimizing item redundancy and creating a briefer instrument was used.

The retained 76 items were reviewed for redundancy and were removed or reworded when appropriate. Specifically, Item 3 and Item 25 were redundant with Item 62 on the topic of using descriptive praise, and were dropped; two items (i.e., Items 47 and 48) were eliminated to avoid redundancy on the topic of explicit instruction on emotional competence; two items related to addressing challenging behavior (i.e., Items 75 and 78) and one item related to social-emotional instructional strategies (i.e., Item 60)

were removed due to redundancy. Some similar or repetitive items were combined and reworded into one item, such as Items 55 and 56, and Items 57 and 64. A total of 22 items were removed based on the procedures described above.

Therefore, the item reduction techniques reduced the SETP-C from 89 to 67 items – a reduction rate of approximately 25%. The retained or reworded 67 items formed the revised version of the SETP-C. The list of these items were still categorized into five pre-specified domains: (a) teaching practices related to Building Nurturing and Responsive Relationships (10 items), (b) teaching practices related to Creating a High-Quality Supportive Classroom Environment (11 items), (c) teaching practices related to Instruction on Targeted Social or Emotional Skills (31 items), (d) teaching practices related to Addressing Challenging Behavior (9 items), and (e) teaching practices related to Supporting Family Use of Social, Emotional, and Behavioral Teaching Practices (6 items).

Phase 3: External Expert Review

Important validity evidence can be obtained from expert judgments of the relationships between the content of an instrument and the constructs it is intended to measure (AERA, APA, & NCME, 2014). In the present study, conceptual and content validation with a panel of Chinese research experts who held early childhood faculty positions in Chinese universities/research institute was conducted. Five Chinese research experts who have expertise in social-emotional instruction, preschool curriculum, or theory of measurement in early childhood and who had not been involved in the construction of the SETP-C were invited to participate in an interview.

The purpose of this interview was to gather validation evidence of the interpretation and use of the SETP-C scores. These Chinese research experts were

from five different normal universities or a research institute (i.e., Beijing Normal University, Northeast Normal University, Capital Normal University, Nanjing Normal University, and Ningbo Research Institute of Education Sciences). Four of the five faculty members had earned doctoral degrees in early childhood education and one had received a doctoral degree in research and evaluation methodology. The professional titles for these Chinese research experts were professor ($n = 1$), associate professor ($n = 2$), and assistant professor ($n = 2$).

Given these Chinese universities and research institute were located in different cities, interviews were administered individually with each Chinese research expert either during a phone or face-to-face meeting. When administering the interviews, the student investigator first introduced the SETP-C to these research experts, including detailed information about its development and planned validation processes. Then, Chinese research experts were asked to answer a series of questions associated with three distinct areas: (a) conceptual basis of the SETP-C (including questions related to cultural relevance, under-representation, over-representation, and unfairness); (b) content validation for each teaching practices item assumed to measure five hypothesized domains; and (c) soundness of the proposed use and interpretation of the SETP-C scores. Interviews were administered in March of 2017 by using an interview protocol approved by the UF Institutional Review Board (see Appendix E and Appendix F). Furthermore, these research experts were asked to provide feedback about the set of 67 items and identify additional items related to the construct of interest using an open-ended question format. Information obtained from interviews was analyzed

qualitatively by summarizing the most common comments and highlighting meaningful suggested revisions to be made.

Several Chinese research experts expressed that they were impressed with the comprehensive processes used to develop the SETP-C and showed enthusiasm to use the instrument to measure social, emotional, and behavioral teaching practices in Chinese preschool contexts, particularly given the practices were built on a multi-tiered framework of promotion, prevention, and intervention practices (i.e., *Pyramid Model*). Consensus agreement by the panel of Chinese research experts was reached on the following statements: (a) the SETP-C has the potential to be an instrument that yields valid and reliable scores to measure preschool social, emotional, and behavioral teaching practices within the socio-cultural context of mainland China; (b) in general, the conceptualization of social, emotional, and behavioral teaching practices based on the *Pyramid Model* and two Chinese early childhood learning standards documents was appropriate for the target population (i.e., Chinese preschool teachers) from preschools with varying levels of quality and different funding sources; (c) each of the five hypothesized domains in the conceptualization was representative of the construct under examination and there were no other domains that have been missed; (d) the five hypothesized domains were closely related to each other, especially between teaching practices associated with Building Nurturing and Responsive Relationships and those associated with Creating a High-Quality Supportive Classroom Environment; as well as among teaching practices related to Supporting Family Use of Social, Emotional, and Behavioral Teaching Practices, teaching practices related to Instruction on Targeted Social or Emotional Skills, and teaching practices related to Addressing Challenging

Behavior; (e) the current 67 teaching practices items were measuring the construct of interest and no item was rated as not measuring any of the five hypothesized domains; and (f) the intended use of the SETP-C scores appeared to be reasonable. These Chinese experts also noted that information gathered from the SETP-C appeared useful for informing decisions about professional development or preservice training for Chinese preschool teachers focused on promoting social, emotional, and behavioral development of young children. Considering it would be administered as a low-stakes measure, the experts agreed there was a very small probability of consequential validity (e.g., unintended and undesired effects of using the SETP-C scores).

Suggested edits and recommended revisions were also made by these Chinese research experts for the further refinement of the SETP-C. These recommended revisions were (a) improve the wording of some SETP-C items and their translation into Chinese (e.g., items were too long, double-barred items, confusing items, ambiguous wording); (b) consider removing the How Important section of the questionnaire and retain the How Often section and the How Confident section to reduce the response burden and complexity of the questionnaire; (c) divide the domain of teaching practices related to Instruction on Targeted Social or Emotional Skills into two subdomains, teaching practices associated with Social-Emotional Instructional Content and teaching practices associated with Social-Emotional Instructional Strategies; and (d) distinguish teaching practices related to using effective strategies to respond to challenging behavior on a daily basis from those related to interventions for children with persistent challenging behavior. In addition, a recommendation was made to add back into the questionnaire an item about explicit instruction on social belonging that was clearly

specified as an important developmental goal in China's ELDG document. This item was initially removed from the SETP-C based on the statistical analyses as described in the previous phase. Finally, the experts recommended additional questions about the characteristics of the teacher or classroom to the SETP-C, such as the professional title of the teacher, the teacher's role in the classroom, whether the teacher has a certification in early childhood education, and the teacher's perspectives about the type of supports most needed to implement preschool social education.

The student investigator and her major professor carefully reviewed feedback and comments from the Chinese research experts who were interviewed. Changes to the revised version of the SETP-C were made based on the feedback received from the Chinese research experts as described above. In addition, after considering issues and concerns raised about the quality of translation, the priority in the next phase shifted from the planned cognitive interviewing to the linguistic interpretation and translation of the SETP-C.

Although the present study was not designed to be a cross-cultural comparative research project involving the application of the same instrument to various linguistic and cultural groups, the SETP-C was initially written in English (source language) and then translated into Chinese (target language). It is important to establish functional equivalence of items between the source and target languages, as well as the adequacy and appropriateness of the translation for the target culture (Cheung & Cheung, 2003; van de Vijver & Tanzer, 2014).

Phase 4: Wording and Translation of Items

Validity evidence based on response processes is important. Theoretical and empirical analyses of the response processes engaged in by instrument takers can

indicate the fit between the construct and the detailed nature of the performance or response of instrument takers (AERA, APA, & NCME, 2014). With the support from a Chinese professor with expertise in preschool social-emotional instruction at Beijing Normal University (BNU), a total of 10 Chinese inservice and preservice preschool teachers were involved in cognitive interviewing using the SETP-C.

Cognitive interviewing is defined as “the administration of draft survey questions while collecting additional verbal information about the survey responses, which is used to evaluate the quality of the response or to help determine whether the question is generating the information that its author intends” (Beatty & Willis, 2007, p. 287). The aim of cognitive interviewing in the present study was to gather information about the respondents’ cognitive processes that they used to answer the questionnaire items, which provided in-depth insight into possible misinterpretation of the translated items and cultural differences in the interpretation.

These 10 Chinese inservice and preservice preschool teachers had a master’s degree or were pursuing a master’s degree in early childhood education. Two of them were full-time preschool teachers, three were newly employed preschool teachers, and the remaining five were graduate students who had at least one-semester practicum teaching experience in preschool classrooms. All of them had sufficient English proficiency to answer questions that included terminology in source language, though the Chinese version of the cognitive interviewing protocol was used. A focus group interview was conducted with five graduate students and individual interviews were administered to five inservice preschool teachers by using an Institutional Review Board

approved protocol in April 2017. Interviews were conducted in conference rooms at BNU and ranged from 2 to 4 hours in length.

A combination of think-aloud and verbal probing methods were used in the cognitive interviewing. The think-aloud approach focused on the verbalization of the thoughts of instrument takers as they responded to the instrument items. Instrument takers were given the instruction to think aloud while completing the instrument (Collins, 2003). In the verbal probing approach, instrument takers were asked specific questions or probes¹ for specific information related to the elements of the instrument items (e.g., wording, expressions, response format) by the interviewer (Padilla & Benitez, 2014). Different types of verbal probes adapted from Willis (2015) were used, including meaning-oriented probe, paraphrasing, process-oriented probe, evaluative probe, elaborative probe, hypothetical probe, recall probe, translation-oriented probe, and fairness-oriented probe.

Sixty-seven items included on the revised version of the SETP-C were the focus of the cognitive interviewing, and special attention was given to 35 items either because they were identified as confusing items by the Chinese research experts, were double-barreled items, or seemed more difficult for respondents to answer than the other items. Considering the advantages and disadvantages of think-aloud and verbal probing, 15 of these items were allocated for the think-aloud method and 20 were assigned for verbal probing method.

Regarding verbal probing, probes can be divided into four categories based on the nature of probe construction and the conditions for probe administration: scripted

¹ In cognitive interviewing, a probe is a question specifically designed to elicit detailed information beyond that normally provided by the interviewee (Willis & Artino, 2013).

probes, conditional probes, spontaneous probes, and emergent probes (Willis, 2005). Only scripted probes and conditional probes were specifically constructed prior to the interview and therefore were included in the interview protocol (see Appendix G). Spontaneous probes and emergent probes were not included in the interview protocol, but were used during the interview as necessary.

Immediately after the cognitive interviewing, these Chinese inservice and preservice preschool teachers were asked to provide written comments on the revised version of the SETP-C, including ease of comprehension of instructions and response format, precise writing and brevity of items, linguistic and cultural appropriateness of translated terms, identification of items that seemed unclear or confusing, and any other concerns about the wording and translation.

Based on information gathered through the cognitive interviewing and written comments, the student investigator modified the revised version of the SETP-C (both English and Chinese version), which was then subjected to scrutiny by both the Chinese early childhood professor at BNU (Chinese version) and the student investigator's major professor at the University of Florida (English version). Several iterations of revisions were conducted by the student investigator and then reviewed by both the Chinese early childhood professor and the student investigator's major professor, with ongoing modifications and edits being made to the questionnaire after each round.

Generally, questionnaire items were reworded and subsequently retranslated to meet the following criteria: (a) items should be as simple and short as possible while still retaining the intended meaning, (b) use terms in the translated version based on psychological, linguistic, and cultural considerations relevant in mainland China, (c)

language and translation used should be familiar to and easily understood by target respondents, (d) repeat nouns instead of using pronouns, (e) employ the active rather than the passive voice, (f) avoid colloquialisms and the subjunctive, (g) use specific rather than general terms, and (h) avoid words that are vague (Brislin, 1986; van de Vijver & Hambleton, 1996; Werner & Campbell, 1970).

Almost all items were carefully re-translated to promote the appropriate and accurate interpretation by respondents, while meeting the guidelines listed above. In addition, particular attention was placed on double-barreled items, items/phrases that were observed during the cognitive interviewing to be confusing to respondents, frequently used phrases throughout the instrument, and culture-specific connotations of phrases. When not violating practices associated with the *Pyramid Model* and China's ELDG and *Guidance* documents, double-barreled items were modified to reflect only one topic. For example, the item "I join in children's play and engage in conversations about their play" was modified to read "While they are playing, I talk with children about their play." Another item that respondents identified as confusing, "I use peer-mediated strategies to support peers to learn and practice pro-social behaviors for use with their classmates who have social skills delays", was re-worded and separated into two items. The two revised items are "I teach peers strategies about how to interact with their classmates with social skills delays" and "I support peers to use pro-social behaviors with their classmates who have social skills delays". The phrase "explicitly teach" was used in more than 10 items, which was translated with slight variation across items, such as 清楚地告诉, 明确指导, 帮助(幼儿)学会, 明确提醒, 明确培养, 明确引导. However, "teach" was not literally translated as 讲授 or 教授, because 讲授 and 教授

have a strict connotation in the Chinese preschool contexts that emphasizes a traditional academic approach and learning is narrowed to only academics (Zhu, 2007).

Summary of the Development and Validation of the SETP-C

The validation activities and evidence described above resulted in the final version of the SETP-C used in the present study. Four phases of investigation were used to develop and validate the use of the SETP-C through systematic and iterative quantitative and qualitative approaches, particularly through the lenses of Chinese early childhood professionals. The first phase was to identify a comprehensive list of potential items from an existing instrument, the empirical Chinese literature, TPOT-P, and two Chinese early childhood learning standards documents. Initially, 262 potential items were generated. This number was reduced to 89 through content alignment analyses, field observation, and pilot testing. These items were subsequently formatted into a self-administered rating scale for further validation, in which each item was rated by 205 Chinese practice experts for its importance and cultural relevance.

The second phase was to perform item reduction based on a combination of psychometric analyses of data obtained from Chinese practice experts and theoretical analyses of items, which decreased the number of items from 89 to 67. This phase was necessary to ensure items were important and culturally relevant to respondents in Chinese preschool contexts, avoided redundancy, and were comprehensive with respect to the construct that the instrument was intended to measure.

In phase 3 of external expert review, a panel of five Chinese research experts who had not been involved in the questionnaire construction was established to review the conceptual basis of the SETP-C and the retained or reworded 67 items. The panel

strongly supported the cultural relevance of the conceptualization of the SETP-C and its intended score use, and provided insights on further modifications or revisions needed.

During the final phase, with a particular focus on improving the quality of translation, cognitive responses and written feedback from 10 Chinese preservice and inservice preschool teachers provided a guide for gauging the SETP-C in terms of its wording and translation. Followed by interactive discussions and ongoing modifications, a 70-item version of the SETP-C was finalized with significant input from two leading early childhood professors.

The SETP-C Used for the Present Study

The final version of the SETP-C used for the present study consisted of two parts (see Appendix H and Appendix I). The first part of the SETP-C was comprised of 70 teaching practice items with a 6-point Likert-type response scale, ranging from 1 = *almost never use/not at all confident* to 6 = *almost always use/extremely confident*. Each teaching practice was designed for rating its reported frequency of use, along with a confidence with implementation rating for each item (i.e., How Often section and How Confident section). A higher score indicated more frequent use of or a higher level of confidence in implementing the social, emotional, and behavioral teaching practices.

Regarding the internal structure of the SETP-C, five domains of the underlying construct the questionnaire was intended to measure were originally hypothesized: (a) teaching practices related to Building Nurturing and Responsive Relationships, (b) teaching practices related to Creating a High-Quality Supportive Classroom Environment, (c) teaching practices related to Instruction on Targeted Social or Emotional Skills, (d) teaching practices related to Addressing Challenging Behavior, and (e) teaching practices related to Supporting Family Use of Social, Emotional, and

Behavioral Teaching Practices. However, two of these domains were suggested to be further divided into two separate subdomains during external expert review (i.e., dividing teaching practices related to Instruction on Targeted Social or Emotional Skills into the Social-Emotional Instructional Content and the Social-Emotional Instructional Strategies domains, and dividing teaching practices related to Addressing Challenging Behavior into the Responses to Challenging Behavior and the Interventions for Children with Persistent Challenging Behavior domains). Therefore, four confirmatory factor analytic models that used all possible combinations of originally hypothesized domains and suggested domains were proposed for the present study, and then were evaluated and compared to identify the best fitting model. It should be noted that domains were allowed to correlate in all models based on the conceptual framework. Table 3-7 provides the item specifications of each confirmatory factor analytic model.

The second part of the SETP-C included 17 questions focused on demographic or attribute information about a teacher and her/his classroom or preschool. Preschool-level variables of primary interest on the SETP-C were the level of program quality rating and funding source. Teacher- or classroom-level variables were teacher's role in the classroom, professional title, level of education, major, certification in early childhood education, years of teaching experience, social-emotional curriculum, age of children in the classroom, child-to-teacher ratio, inclusion status of the classroom (whether children with disabilities were enrolled), and enrollment of children with persistent challenging behavior. These variables were selected for inclusion either because of comments from Chinese research experts or based on empirical evidence showing relationships exist between these variables and preschool teachers' classroom

teaching practices (e.g., Erden & Sonmez, 2011; Heo, Cheatham, Hemmeter, & Noh, 2014; Wang, Elicker, McMullen, & Mao, 2008). The last question on the SETP-C asked teachers to indicate, using a list provided, the type of supports that they most wanted to receive to implement preschool social education.

Gathering Perspectives of Chinese Preschool Teachers about Their Social, Emotional, and Behavioral Teaching Practices

In the sections that follow, the substantive research questions, research design, study setting, and sampling strategy used to gather the perspectives of Chinese preschool teachers about their social, emotional, and behavioral teaching practices are described. Demographic information about the study participants and data analytic procedures used to address each research question are also described.

Research Questions

The following research questions were addressed as part of the present study.

1. Based on the SETP-C data obtained from a sample of Chinese preschool teachers, is there score validity evidence that supports internal structure and score reliability evidence that supports internal consistency?
2. What are Chinese preschool teachers' perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practices as measured by the SETP-C?
3. To what extent are teacher or classroom characteristics (role, professional title, education, major, certification, teaching experience, curriculum, child-to-teacher ratio, child age, inclusion of children with disabilities, enrollment of children with persistent challenging behavior) and features of preschools (city, region, funding source, quality rating) associated with Chinese preschool teachers' ratings of use and confidence with implementing teaching practices as measured by the SETP-C?
4. Do Chinese preschool teachers with different individual, classroom, and preschool characteristics vary in the types of supports they report are needed to prepare them to implement preschool social education?

Research Design

A non-experimental survey research design was used to gather data from Chinese preschool teachers using the SETP-C. Non-experimental designs are quantitative, multi-subject designs in which variables are not manipulated and participants are not assigned to treatment conditions (Horn, Snyder, Coverdale, Louie, & Roberts, 2009; Thompson, Diamond, McWilliam, Snyder, & Snyder, 2005). Variables of interest in non-experimental designs are measured as they occur naturalistically. Non-experimental designs allow researchers to examine the relationships between and among variables but do not provide evidence about causal mechanisms (Thompson et al., 2005).

In the present study, the survey research method was used, which can be defined as a method of gathering information systematically from a sample of individuals from a defined population of interest (Groves et al., 2004; Hox, De Leeuw, & Dillman, 2008). Survey research involves the collection of information by asking study samples to respond to questions or items. Their answers constitute the data to be analyzed (Fink & Kosecoff, 1998; Fowler, 2009). The purpose of the survey research method is to produce statistics, that is, quantitative or numerical descriptions about the attributes or perspectives of the study sample, which can be generalized to a target population by drawing inferences based on data collected from a small portion of the population (Rea & Parker, 2014).

In the present study, the SETP-C was given to individual respondents (i.e., Chinese preschool teachers) to complete, which was considered a self-report questionnaire (Bourque & Fielder, 2003). This study employed a cross-sectional, descriptive survey design (Fink, 2003). All information or variables of interest on the

SETP-C were collected at one fixed point in time. A non-experimental, descriptive survey research design was appropriate to examine the four substantive research questions posed above.

Setting

Completion of the SETP-C questionnaires took place in preschools in Beijing, the capital of the PRC, and Ningbo, a sub-provincial city in northeast Zhejiang province in the PRC. In mainland China, there are mainly three types of early childhood education institutions: nurseries serve children under age 3, preschools are for children from 3 to 6, and the so-called “pre-primary class” attached to elementary schools (usually in rural areas) are for 5- to 6-year-old children (Vaughan, 1993; Wu, Young, & Cai, 2012; Zhu, 2009). Traditionally, nurseries are regulated by the Ministry of Health (MOH) and preschools are overseen by the Ministry of Education (MOE). Due to the effort to integrate nurseries and preschools and form continuous early care and education for children from birth to age 6, preschools are gradually taking over responsibility for enrolling children 2- to 3-years-of age and providing education and guidance service for infants and toddlers birth to 2-years of age and their families (Zhu, 2009). Children under age 3 are more likely to stay home with their grandparents (Hu & Szente, 2009). The *Preschool Work Regulations and Procedures* recommended three groupings in preschools: junior class (3- to 4-year olds), middle class (4- to 5-year olds) and senior class (5- to -6-year olds). A junior class is recommended to enroll 25 children, a middle class to enroll 30 children, and a senior class to enroll 35 children (Ministry of Education, 2016). In 2016, there were a total of 239,812 preschools in mainland China and 44,138,630 young children enrolled in 1527,353 preschool classes across these preschools (Department of Development & Planning, 2017).

A preschool teacher is a type of early childhood educator who is responsible for the direct care, supervision, guidance, and education of children in preschool classroom settings. In mainland China, individuals must complete their studies at a vocational normal school (equivalent to high school diploma) or higher to qualify for the Preschool Teacher Permit/Certification. Both central and local governments of the PRC provide training for preservice and inservice preschool teachers through distance and online education programs. A significant number of preschool teachers have had three or more years of college education (Zhu, 2008). In 2016, there were 3,817,830 educational personnel² across all 239,812 preschools in mainland China, including 2,232,067 full-time preschool teachers. About 76.5% of full-time teachers have received an associate's degree or higher. Sixty-eight percent of these teachers had majored in early childhood education, and 25.9% held a professional title (Department of Development & Planning, 2017).

Preschools in Beijing

Located in northern China, Beijing is governed as a direct-controlled municipality under the Central People's government and is the nation's political, cultural, and educational center. Beijing is one of the most populous cities in the world and the 2nd largest city by urban population in mainland China, with a population of 21,729,000 in 2016. About 86.5% of the population in Beijing lived in urban areas, whereas 13.5% resided in rural areas (Beijing Statistics Bureau, 2017). Beijing also ranked as the second top city by gross domestic product in mainland China (China Internet Watch Team, 2016). Beijing is divided into 16 districts (18 districts before 2012). In 2016, there

² Educational personnel (教职工) in a preschool typically consists of a principal, full-time teachers, child-care workers, health physicians, substitute teachers, part-time teachers, and other personnel.

were 1,570 preschools in Beijing and 416,982 young children enrolled in 14,913 preschool classes across these preschools (Department of Development & Planning, 2017). According to the *Beijing Preschool Standards*, a preschool classroom should be equipped with at least 2 full-time teachers and 1 child-care worker (Beijing Municipal Commission of Education, 1996). In 2016, there were 65,806 educational personnel across all 1,570 preschools in Beijing, including 36,071 full-time preschool teachers. Nearly 90% of preschool principals and teachers in Beijing have received an associate's degree or above (Department of Development & Planning, 2017).

Preschools in Ningbo

As the home of the world's busiest port, Ningbo ranked as the 16th top city by gross domestic product in mainland China (China Internet Watch Team, 2016) and is a prosperous city well known for education and business. Ningbo's population at the end of 2016 was 7,875,000, with an urban percentage around 80% (Ningbo Municipal Statistics Bureau, 2017a). The metropolis, located on the coast of the East China Sea in Zhejiang province, is divided into 10 districts. In 2016, there were a total of 1,252 preschools in Ningbo and 282,000 young children enrolled across these preschools (Ningbo Municipal Education Bureau, 2017b). In 2016, there were 35,800 educational personnel across all 1,252 preschools in Ningbo, including 19,800 full-time preschool teachers. More than 90% of preschool principals and teachers in Ningbo have obtained an associate's degree or above (Ningbo Municipal Education Bureau, 2017b).

Sampling Strategy

A multi-stage sampling strategy was used to obtain a sample of Chinese preschool teachers from the target population of preschool teachers in Beijing and Ningbo. Multistage sampling is an efficient way of collecting information when it is either

impossible or impractical to compile an exhaustive list of the units constituting the target population (Fink, 2003; Fowler, 2009), which was the case in the present study. It is unlikely that a list of all preschool teachers in Beijing and Ningbo could be obtained.

The first stage of sampling in the present study was to select districts from each city. With the support from an early childhood faculty member at Beijing Normal University and an administrator and early childhood researcher at Ningbo Research Institute of Education Sciences, six districts in Beijing and six in Ningbo that represented different levels of economic development within the city (i.e., low, middle, high) were randomly selected. At the second stage, a cluster random sampling procedure was used to obtain a sample of Chinese preschool teachers from the chosen districts. In cluster random sampling, the target population is divided into separate groups, called clusters, and a given number of clusters are then randomly selected (Hibberts, Johnson, & Hudson, 2012). In the present study, preschools were naturally occurring clusters that were composed of multiple preschool teachers. Lists of these clusters were more accessible and easier to develop than lists of preschool teachers.

Once 12 districts in Beijing and Ningbo were selected, a list of all or nearly all registered preschools in each district was generated based on the best available information either from each district's Commission of Education website or contact with early childhood administrators at each district. This list was originally arranged alphabetically and each preschool on the list was assigned a unique identifier. The R statistical package (R Development Core Team, 2012) was then used to select 10 unique identifiers on the list at random for each district. This procedure was repeated for each selected district. Therefore, a random sample of 120 preschools (i.e., 60 in Beijing

and 60 in Ningbo) was selected, and all teachers in the selected preschools were invited to participate in the present study.

The principal or vice principal from each selected preschool was contacted and was asked to distribute the SETP-C to all teachers in his/her preschool. Based on their preference, preschool teachers were given a choice to complete either the “written” version of the SETP-C (paper-and-pencil survey) or the electronic version of the SETP-C through a Chinese online survey service called Sojump (web-based survey). Both the paper-and-pencil survey and the web-based survey were anonymous. The names of preschools or teachers did not appear anywhere on the questionnaire, only the unique identifier assigned to the preschool. All teachers in the same participating preschool were assigned their preschool’s unique identifier. For the paper-and-pencil survey, the unique identifier was written on each completed questionnaire by the student investigator after preschool teachers completed and returned the SETP-C. For the web-based survey, different links to complete the SETP-C were given to teachers in different preschool programs. To minimize duplicate and fraudulent entries, the web-based survey on Sojump was set to accept only one submission from a device (e.g., computer or phone) and only the individuals who were given a link could access to the questionnaire. All the recruitment and data collection procedures were approved by the University of Florida Institutional Review Board (IRB201701186).

Participants

Among the 120 selected preschools in Beijing and Ningbo, all consented to participate in the present study. A total of 2,407 preschool teachers from these preschools were invited to participate in the present study, and 2,087 of them completed and returned the SETP-C, with an average response rate of 86.7%. The response rate

in Beijing was 81.8% and the response rate in Ningbo was 91.3%. Of all participating preschools, 82 were located in urban areas and 38 in rural areas; 92 were public preschools and 28 were private preschools; 47 received a quality rating of “excellent”, 58 received a quality rating of “good”, and 15 were licensed but unrated for quality. One hundred teachers from three preschools in Beijing chose the paper-and-pencil survey, whereas teachers in the remaining 117 preschools completed the web-based survey. Given concerns regarding data quality of web-based survey research, several procedures have been suggested to minimize invalid web-based survey data (Bauermeister et al., 2012; Konstan, Rosser, Ross, Stanton, & Edwards, 2005). Each completed questionnaire in the present study was screened to detect invalid survey responses. Invalid survey responses were identified using the following criteria: (a) questionnaire was completed by unexpected individuals in cities other than Beijing and Ningbo, (b) questionnaire was completed in a less than realistic time frame (i.e., < 5 minutes), or (c) there existed suspicious response patterns within the questionnaire, for example, individuals chose the same response category for more than 90% of the questionnaire items.

Four hundred and eighty-eight invalid cases were subsequently identified and excluded for data analyses. Therefore, the analytic sample size for the present study was 1,599. Table 3-8 provides a side-by-side comparison of the analytic sample and excluded sample demographics. There were no major differences between these two samples across various demographic variables. As shown in Table 3-8, the analytic sample and excluded sample shared similar patterns in terms of percentage of teachers with different individual, classroom, and preschool characteristics.

Of the 1,599 Chinese preschool teachers in the analytic sample for the present study, 730 came from Beijing (45.7%) and 869 from Ningbo (54.3%); 1,135 teachers were from preschools located in urban areas (71.0%) and 464 from those in rural areas (29.0%); 1,304 teachers were employed in public preschools (81.6%) and 295 in private preschools (18.4%); 714 teachers were from preschools receiving a quality rating of “excellent” (44.7%), 738 from preschools rated as “good” quality (46.2%), and 147 from licensed preschools but not yet being rated for their quality (9.3%).

Most of the participating teachers in the analytic sample majored in early childhood education ($n = 1,442$; 90.2%) and were certified preschool teachers ($n = 1,524$; 95.3%). More than half of them earned a professional title ($n = 990$; 61.9%), and reported holding a bachelor’s degree or above ($n = 1,008$; 63.0%). Teachers had a mean of 8.6 years of teaching experience in preschool settings ($SD = 7.7$, range = .1–39.0).

The child age make-up of the classrooms where teachers were assigned for their work was as follows: 3- to 4-year-olds (27.8%), 4-to 5-year-olds (29.4%), 5-to 6-year-olds (28.8%), 6-to 7-year-olds (12.5%), and mixed ages (1.4%). The mean group size for these classrooms was reported to be nearly 30 children, with a range of 3 to 48 children. Each classroom was staffed with 1 to 5 teachers ($M = 3$, $SD = .7$). The average child-to-teacher ratio for these classrooms was 10.3:1 ($SD = 3.1:1$, range = 1.5:1–22.5:1). At the time of data collection, about 16.0% of teachers ($n = 256$) reported that at least one child enrolled in their classrooms had a disability.

Sixty-three percent of the teachers ($n = 1,013$) reported having at least one child with persistent challenging behavior in their classrooms. Of these teachers, the mean

number of children with persistent challenging behavior in the classroom was reported as 1.9 (range = 1–12). Only 5.5% of teachers ($n = 88$) reported that they were currently implementing a named social-emotional curriculum in their classrooms, such as Zippy's Friends (“比比和朋友” 课程) and Empathy and Companion (“共情陪伴” 课程).

Table 3-8 also provides a comparison of the present study sample to the national population of Chinese preschool teachers on select variables when national percentage data were able to be calculated based on the most recent data available in 2016 *Educational Statistics Yearbook of China* (Department of Development & Planning, 2017). Similar to the national population, the analytic sample was predominately teachers from urban areas. Research has well documented large urban-rural and regional disparities of early childhood education in mainland China, including teacher qualifications (Hong, Liu, Ma, & Luo, 2015; Zhu & Zhang, 2008). Given Chinese teachers in two well-developed metropolises (i.e., Beijing and Ningbo) were recruited for the present study, it was not unexpected that teachers in the analytic sample were more likely to be highly educated with a major in early childhood education and have obtained a professional title, when compared with all preschool teachers in mainland China. With respect to the national population, the majority of Chinese preschool teachers did not receive a professional title (74.1%), only 19.9% of them have obtained a bachelor degree or above, and about 32.4% did not major in early childhood education.

Analytic Procedures

Descriptive and inferential statistical analyses were used to analyze study data. The sections that follow describe procedures used for data preparation, data entry, and data analyses for each research question.

Data file preparation

A researcher-generated unique identifier for each of the participating preschools in Beijing and Ningbo was used in the present study. For the web-based survey, each selected preschool was assigned a unique link to the electronic version of the SETP-C for all teachers in that particular preschool. This means that teachers from different preschools were assigned different links to complete the web-based survey and their responses were automatically saved into separate files. For the paper-and-pencil survey, data from questionnaires answered by teachers from different preschools were entered in separate files. Therefore, data obtained from all participating teachers in the same preschool were stored in a folder that matched the unique identifier assigned for the preschool. Then, data files were merged from each folder into one data file in Microsoft® Excel with all variables of interest for the present study. Data from this file was subsequently imported into the Statistical Package for the Social Sciences (SPSS). Syntax was written to recode missing data (because “-9” was coded for missing data in Excel). Nominal demographic variables with two categories were either coded or recoded using a 0/1 coding scheme, while nominal demographic variables with more than two categories were dummy coded in SPSS. Descriptions and scoring of demographic variables are shown in Table 3-9.

Once missing data for the social, emotional, and behavioral teaching practices were recoded, item-level data were used to generate composite scores for the latent variables. Summated composite scores were calculated in SPSS by summing item-level scores for the items associated with each of the latent variable subscales for the SETP-C derived in the best fitting confirmatory factor analytic model. The SPSS data file was

then converted to a DAT file readable by *Mplus* version 7.4 (Muthén & Muthén, 1998-2017). Variable coding and recoding syntax are shown in Appendix J.

In the present study, the amount of missing data was very small (i.e., average rate of missing data across all items was .05%, with a range from .0% to .3%), primarily because the Sojump software did not allow participants to submit the survey with incomplete responses. Therefore, no techniques were needed to deal with missing data in the present study (Fichman & Cummings, 2003; Roth, 1994).

Research question 1

To examine the score validity and reliability evidence of the SETP-C for this sample of Chinese preschool teachers, confirmatory factor analyses (CFAs) were conducted separately for the How Often section and the How Confident section. CFA is a form of latent variable modeling intended to test theories or hypotheses about the relationship between latent variables and their observed variables (Raykov & Marcoulides, 2011). In a CFA, a priori theory specifies the number of latent variables and the nature of these variables. In the present study, the internal structure of the SETP-C was examined throughout its development and through four competing CFA models that were proposed as described earlier in this chapter (also see Table 3-7).

To evaluate the extent to which various CFA models provided validity evidence based on the internal structure of the SETP-C, a series of categorical CFAs were conducted in *Mplus*. Given the items on the SETP-C were ordinal categorical variables ranging from 1 (*almost never/not at all confident*) to 6 (*almost always/extremely confident*), the weighted least squares with adjusted means and variances (WLSMV) estimations were used. A non-statistically significant chi-square test was expected. Several fit indices are recommended in the literature to assess model fit between the

hypothesized model and the observed data. In the present study, the following goodness of fit indices were used: root mean square error of approximation (RMSEA; Steiger, 1990), comparative fit index (CFI; Bentler, 1990), and Tucker-Lewis index (TLI; Tucker & Lewis, 1973). Hu and Bentler (1999) suggest RMSEA values $\leq .06$, and CFI and TLI values $\geq .95$ indicate good model fit. Given the chi-square test is sensitive to sample size, a poor fit may result in a non-significant chi-square statistic in a small sample size, while a good fit will probably result in a statistically significant chi-square statistic when the sample size is large (Marsh, Balla, & McDonald, 1998). Therefore, three goodness of fit indices (i.e., RMSEA, CFI, and TLI) were used as the primary sources of information to determine the adequacy of model fit.

Model comparison tests were then conducted to determine the best fitting model. Because the four proposed CFA models were nested, chi-square difference tests were used to compare each pair of the models. Specifically, the new scaled difference test (Satorra & Bentler, 2010) under WLSMV estimation was used, in which a model's scaling correction factor was computed to ensure the strictly positive difference test statistic (Bryant & Satorra, 2012). Significant chi-square differences between models indicate the less restricted model (called the H_1 model by *Mplus*) fit the data better than the more restricted model (called the H_0 model by *Mplus*). Similar to chi-square tests applied to a single model, chi-square difference tests for nested models are also dependent on sample size (Brannick, 1995). Therefore, model comparisons were then performed based on a practical improvement in model-fit approach, that is, a difference of .01 or greater between TLI estimates as recommended by Vandenberg and Lance (2000), in combination with the chi-square difference tests.

Once the best fitting CFA model with a solid theoretical and empirical basis was chosen, two approaches to estimating internal consistency score reliability were used in the present study. First, Cronbach's alpha internal consistency score reliability coefficients based on the classical test theory approach was used. Cronbach's alpha was computed for each latent variable subscale in SPSS. Second, the omega coefficient of reliability based on the factor analytic model was used as well, which assesses the proportion of variance in observed summated scores across items due to the common underlying latent variable. For each latent variable subscale, instead of relying on the assumption of the essential tau equivalence, the congeneric relationship between items within a particular latent variable (i.e., unidimensional with no significant error correlations) was assumed (Dunn, Baguley, & Brunnsden, 2014). The omega coefficient was hand-calculated using estimated standardized factor loadings and error variances of each observed item, based on the results of the best fitting CFA model.

Research question 2

To examine Chinese preschool teachers' perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practices as measured by the SETP-C, average composite scores were generated by averaging the item-level scores for the items associated with each latent variable as indicated in the best fitting CFA model. Descriptive analyses (including means, standard deviations, ranges) and correlational analyses were conducted using summated and average composite scores for each latent variable, separately. However, emphasis was placed on the results based on average composite scores because they were on the same scale as items of 1 to 6, which allowed the comparisons of scores across latent variable subscales.

In the conceptualization of the construct that the SETP-C intended to measure, latent variable subscales were allowed to be correlated. Depending on the best fitting CFA model, correlations among latent variable subscales were also estimated to determine the direction and strength of the correlational relationship between latent variable subscales. A one-factor repeated measures ANOVA model was used to test the mean differences among the latent variable subscales. Analyses were conducted for the How Often section and the How Confident section separately.

Research question 3

To examine both teacher/classroom-level and preschool-level predictors of teaching practices, a multilevel modeling (Heck & Thomas, 2009; Raudenbush & Bryk, 2002) was conducted in *Mplus* Version 7.4. The present study involved a two-level hierarchical data structure with individual teachers nested within preschools. It was expected that the responses of teachers within the same preschool would be more alike than those from teachers in different schools, in other words, there existed the dependency of teachers' responses within a preschool (Raudenbush & Bryk, 1986; Snijders & Bosker, 1999). Multilevel modeling provides a technique to address the non-independence of residuals. In the present study, both teachers and preschools were units in the analysis. The outcome variable was teacher's scores on each latent variable subscale.

At level 1, the units were teachers and each teacher's outcome was represented as a function of a set of teacher and classroom characteristics. The variance in the outcome was decomposed into two components: (a) variation due to differences between preschools (between-group variance), and (b) variation due to individual differences after accounting for preschool differences (within-group variance). Intraclass

correlation coefficients (ICCs) provided an estimate for measuring the proportion of total variance that was attributed to the homogeneity within preschools. Teacher or classroom-level predictors were (a) teacher's role in the classroom, (b) professional title, (c) level of education, (d) major, (e) certification in early childhood education, (f) years of teaching experience, (g) social-emotional curriculum, (h) child-to-teacher ratio in the classroom, (i) child age in the classroom, (j) inclusion of children with disabilities, and (k) enrollment of children with persistent challenging behavior.

At level 2, the units were preschools. The regression coefficients in the level-1 model for each preschool were conceived as outcome variables that are hypothesized to depend on specific preschool characteristics. Preschool-level predictors were (a) city, (b) region, (c) funding source, and (d) quality rating. The definitions for these predictor variables at levels 1 and 2 are shown in Table 3-9. Given the present study involves multiple level-1 predictors and multiple level-2 predictors, the intercepts as outcomes (IAO) model was used.

The first step in multilevel model analysis was to build an unconditional model (alternatively referred to as the "empty model" or "null model"), in which no predictor variables at either level 1 or 2 were included. The unconditional model characterized only random variance between groups and random variation within groups (Snijders & Bosker, 2012). The ICC and design effect was calculated based on the unconditional model. In complex survey design, the design effect is the ratio of the variance under design-based analysis to the variance under simple random sampling, which provides a measure of the inflation in variance that occurs due to homogeneity within clusters (Lehtonen & Pahkinen, 2004).

Then, for the IOA model, the maximum likelihood estimation method was used to estimate the parameters and model fit. All categorical variables were dummy coded and all continuous variables were centered by their grand mean in order to clarify the interpretation of results. The unconditional model and IOA model were conducted separately for each latent variable subscale on the How Often and the How Confident sections.

Research question 4

To examine the relationships of various individual, classroom, and preschool variables to the types of supports Chinese preschool teachers reported they needed for preschool social education, the chi-square test of association for nominal categorical variables and the Kruskal-Wallis analysis of variance for continuous variables were conducted in SPSS. In the last question on the SETP-C, teachers were asked to indicate, using a list provided, one type of supports that might best prepare them to implement preschool social education. The type of supports reported was considered a nominally scaled variable and was the dependent variable for this research question. Variables of interest that were nominal categorical variables consisted of (a) teacher's role in the classroom, (b) professional title, (c) level of education, (d) major, (e) certification in early childhood education, (f) social-emotional curriculum, (g) child age in the classroom, (h) inclusion of children with disabilities, (i) enrollment of children with persistent challenging behavior, (j) city of preschool, (k) region of preschool, (l) funding source for preschool, and (m) quality rating of preschool. These variables were treated as independent variables and were also nominal categorical variables. Two independent variables of interest that were continuous variables were (a) years of teaching experience and (b) child-to-teacher ratio in the classroom.

As a non-parametric procedure, the chi-square test of association was used to determine whether there was an association or relationship between two or more nominal variables. Contingency tables were produced for each nominal independent variable and dependent variable. In contingency tables, each combination of the two variables is labeled as a cell. Each cell in a contingency table contained two pieces of information: the number of observations in that cell and the observed proportion in that cell. Two assumptions are made for the chi-square test of association: (a) observations are independent and (b) expected frequency is at least 5 per cell (Lomax & Hahs-Vaughn, 2012). The chi-square test of association is too sensitive when the expected values are less than 5. For the cases that the second assumption was violated, the Fisher-Freeman-Halton exact test was used (Lydersen, Pradhan, Senchaudhuri, & Laake, 2007). If two variables had an association, the standardized residuals were used to determine the cells that have significantly different observed to expected proportions. According to Lomax and Hahs-Vaughn (2012), “cells where the standardized residuals are greater (in absolute value terms) than 1.96 (where $\alpha = .05$) or 2.58 (where $\alpha = .01$) are significantly different in observed to expected frequencies” (p. 223). Given the contingency tables for the present study were larger than 2×2 , Cramer’s V and Cohen’s ω were calculated when there was a statistically significant association, which provided an effect size measure. Cohen’s ω can be computed from the contingency coefficient (Lomax & Hahs-Vaughn, 2012).

With respect to two continuous independent variables that were not normally distributed, the Kruskal-Wallis one-way analysis of variance was used to determine whether Chinese preschool teachers’ needed types of supports were different on each

continuous variable. The Kruskal-Wallis one-way analysis of variance is a non-parametric test in which the ranks of data values are used rather than the actual data points (Chan & Walmsley, 1997; Kruskal & Wallis, 1952). In SPSS, post-hoc pairwise comparisons using the Dunn-Bonferroni approach are automatically produced when the Kruskal-Wallis test is statistically significant.

Analytical syntax used in SPSS or *Mplus* to address the four research questions is shown in Appendix K.

Table 3-1. Descriptive statistics for the TPOT-P indicators.

TPOT-P item	Indicator	<i>n</i>	Descriptive Statistics			
			Minimum	Maximum	<i>M</i>	<i>SD</i>
Schedules, Routines, and Activities (SR)	SR1	20	.00	1.00	.15	.37
	SR2	20	.00	1.00	.10	.31
	SR3	20	.00	1.00	.35	.49
	SR4	20	.00	1.00	.20	.41
	SR5	20	.00	.00	.00	.00
	SR6	20	.00	1.00	.65	.49
	SR7	20	.00	1.00	.55	.51
	SR8	20	.00	.00	.00	.00
	SR9	20	.00	1.00	.75	.44
	SR10	20	.00	1.00	.10	.31
Transitions between Activities are Appropriate (TR)	TR1	20	1.00	1.00	1.00	.00
	TR2	20	.00	1.00	.35	.49
	TR3	20	.00	1.00	.60	.50
	TR4	20	.00	1.00	.80	.41
	TR5	20	.00	1.00	.20	.41
	TR6	20	.00	1.00	.65	.49
	TR7	20	.00	1.00	.25	.44
	TR8	20	.00	1.00	.80	.41
Teachers Engage in Supportive Conversations with Children (SC)	SC1	20	1.00	1.00	1.00	.00
	SC2	20	1.00	1.00	1.00	.00
	SC3	20	1.00	1.00	1.00	.00
	SC4	20	.00	1.00	.80	.41
	SC5	20	1.00	1.00	1.00	.00
	SC6	20	.00	1.00	.35	.49
	SC7	20	.00	.00	.00	.00
	SC8	20	.00	1.00	.20	.41
	SC9	20	.00	1.00	.10	.31
	SC10	0	--	--	--	--
Promoting Children's Engagement (ENG)	ENG1	20	.00	1.00	.80	.41
	ENG2	20	.00	1.00	.95	.22
	ENG3	20	.00	1.00	.75	.44
	ENG4	20	.00	1.00	.95	.22
	ENG5	20	.00	1.00	.40	.50
	ENG6	20	.00	1.00	.10	.31
	ENG7	20	.00	.00	.00	.00
	ENG8	10	.00	.00	.00	.00
	ENG9	20	.00	1.00	.30	.47
Teaching Children Behavior Expectations (TBE)	TBE1	20	.00	.00	.00	.00
	TBE2	20	.00	.00	.00	.00
	TBE3	20	.00	.00	.00	.00
	TBE4	20	.00	.00	.00	.00
	TBE5	20	.00	.00	.00	.00
	TBE6	20	.00	.00	.00	.00
	TBE7	20	.00	.00	.00	.00
Providing Directions (PD)	PD1	20	1.00	1.00	1.00	.00
	PD2	20	1.00	1.00	1.00	.00
	PD3	20	.00	1.00	.05	.22
	PD4	20	.00	1.00	.30	.47
	PD5	20	.00	1.00	.60	.50
	PD6	20	.00	1.00	.25	.44
	PD7	20	.00	1.00	.15	.37

Table 3-1. Continued

TPOT-P item	Indicator	<i>n</i>	Descriptive Statistics			
			Minimum	Maximum	<i>M</i>	<i>SD</i>
Teaching Social Skills and Emotional Competencies (TSC)	TSC1	20	.00	1.00	.70	.47
	TSC2	20	.00	1.00	.25	.44
	TSC3	20	.00	1.00	.20	.41
	TSC4	20	.00	1.00	.10	.31
	TSC5	20	.00	.00	.00	.00
	TSC6	20	.00	.00	.00	.00
	TSC7	20	.00	1.00	.10	.31
	TSC8	20	.00	1.00	.10	.31
Collaborative Teaming (CT)	CT1	20	.00	1.00	.90	.31
	CT2	20	1.00	1.00	1.00	.00
	CT3	20	.00	1.00	.80	.41
	CT4	12	.00	1.00	.08	.29
	CT5	20	.00	1.00	.95	.22
	CT6	20	.00	1.00	.15	.37
	CT7	20	.00	1.00	.25	.44
	CT8	20	.00	.00	.00	.00
	CT9	20	.00	1.00	.70	.47
Using Effective Strategies to Respond to Challenging Behavior (SCB)	SCB1	9	.00	1.00	.67	.50
	SCB2	9	.00	.00	.44	.53
	SCB3	9	.00	.00	.00	.00
	SCB4	9	.00	1.00	.33	.50
	SCB5	9	.00	.00	.00	.00
	SCB6	9	.00	.00	.00	.00
	SCB7	9	.00	.00	.00	.00
	SCB8	9	.00	.00	.00	.00
Teaching Children to Express Emotions (TEE)	TEE1	20	.00	1.00	.70	.47
	TEE2	20	.00	1.00	.45	.51
	TEE3	20	.00	1.00	.60	.50
	TEE4	20	.00	.00	.00	.00
	TEE5	20	.00	1.00	.85	.37
	TEE6	20	.00	.00	.00	.00
	TEE7	20	.00	1.00	.05	.22
	TEE8	20	.00	1.00	.30	.47
Teaching Problem Solving (TPS)	TPS1	20	.00	1.00	.35	.49
	TPS2	20	.00	1.00	.25	.44
	TPS3	20	.00	.00	.00	.00
	TPS4	20	.00	.00	.00	.00
	TPS5	20	.00	1.00	.05	.22
	TPS6	20	.00	.00	.00	.00
	TPS7	20	.00	.00	.00	.00
	TPS8	20	.00	1.00	.05	.22
	TPS9	20	.00	.00	.00	.00
Supporting Friendship Skills (FR)	FR1	20	.00	1.00	.65	.49
	FR2	20	.00	1.00	.10	.31
	FR3	20	.00	1.00	.35	.49
	FR4	20	.00	1.00	.45	.51
	FR5	20	.00	.00	.00	.00
	FR6	20	.00	1.00	.05	.22
	FR7	20	.00	.00	.00	.00
	FR8	20	.00	.00	.00	.00
	FR9	20	.00	1.00	.15	.37

Table 3-1. Continued

TPOT-P item	Indicator	<i>n</i>	Descriptive Statistics			
			Minimum	Maximum	<i>M</i>	<i>SD</i>
Supporting Children with Persistent Challenging Behavior (PCB)	PCB1	20	.00	1.00	.30	.47
	PCB3	20	.00	.00	.00	.00
	PCB3	20	.00	1.00	.05	.22
	PCB4	20	.00	.00	.00	.00
	PCB5	20	.00	.00	.00	.00
Communicating with Families and Promoting Family Involvement in the Classroom (COM)	COM1	20	.00	.00	.00	.00
	COM2	20	1.00	1.00	1.00	.00
	COM3	20	.00	1.00	.05	.22
	COM4	20	.00	1.00	.45	.51
	COM5	20	.00	1.00	.30	.47
	COM6	20	.00	1.00	.25	.44
	COM7	20	.00	1.00	.05	.22
	COM8	20	.00	1.00	.20	.41
Involving Families in Supporting Their Child's Social-Emotional Development and Addressing Challenging Behavior (INF)	INF1	20	.00	1.00	.15	.37
	INF2	20	.00	.00	.00	.00
	INF3	20	.00	1.00	.35	.49
	INF4	20	.00	.00	.00	.00
	INF5	20	.00	.00	.00	.00
	INF6	20	.00	1.00	.25	.44
	INF7	20	.00	1.00	.20	.41
Red Flags (RF)	RF1	20	.00	1.00	.45	.51
	RF2	20	.00	.00	.00	.00
	RF3	20	.00	1.00	.35	.49
	RF4	20	.00	1.00	.10	.31
	RF5	20	.00	1.00	.05	.22
	RF6	20	.00	.00	.00	.00
	RF7	20	.00	1.00	.15	.37
	RF8	20	.00	.00	.00	.00
	RF9	20	.00	1.00	.70	.47
	RF10	20	.00	1.00	.50	.51
RF11	20	.00	1.00	.25	.44	
RF12	20	.00	.00	.00	.00	
RF13	20	.00	.00	.00	.00	
RF14	20	.00	1.00	.55	.51	
RF15	20	.00	.00	.00	.00	
RF16	20	.00	1.00	.45	.51	
RF17	20	.00	1.00	.05	.22	

Table 3-2. Descriptive statistics for the items on the pilot version of the SETP-C.

Subscale	Item	How Important Section				How Often Section				How Confident Section						
		<i>n</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>	<i>n</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>	<i>n</i>	Minimum	Maximum	<i>M</i>	<i>SD</i>
Teaching of social competence	1	20	3.00	4.00	3.85	.37	20	3.00	4.00	3.35	.49	20	2.00	4.00	3.05	.39
	2	20	3.00	4.00	3.75	.44	20	2.00	4.00	3.30	.57	20	2.00	4.00	2.95	.61
	3	20	3.00	4.00	3.60	.50	20	2.00	4.00	3.25	.64	20	2.00	4.00	2.90	.79
	4	20	3.00	4.00	3.75	.44	20	2.00	4.00	3.40	.60	20	2.00	4.00	2.80	.62
	5	20	3.00	4.00	3.80	.41	20	2.00	4.00	3.40	.60	20	2.00	4.00	3.25	.64
Teaching of emotional competence	6	20	2.00	4.00	3.10	.79	20	2.00	4.00	2.85	.75	20	2.00	4.00	2.75	.55
	7	20	2.00	4.00	3.55	.61	20	2.00	4.00	3.25	.55	20	1.00	4.00	3.05	.76
	8	20	2.00	4.00	3.45	.61	20	2.00	4.00	3.05	.61	20	2.00	4.00	2.85	.49
	9	20	3.00	4.00	3.65	.49	20	3.00	4.00	3.45	.51	20	2.00	4.00	2.95	.61
Preventing/addressing challenging behavior	10	20	3.00	4.00	3.45	.51	20	2.00	4.00	2.85	.67	20	1.00	4.00	2.75	.72
	11	19	3.00	4.00	3.68	.48	20	2.00	4.00	3.10	.72	19	2.00	4.00	2.84	.69
	12	20	3.00	4.00	3.55	.51	20	2.00	4.00	3.25	.55	20	2.00	4.00	2.95	.61
	13	18	3.00	4.00	3.67	.49	18	2.00	4.00	3.11	.83	18	2.00	4.00	2.83	.79
	14	20	2.00	4.00	3.45	.61	20	2.00	4.00	3.15	.81	19	2.00	4.00	2.89	.66
Social-emotional teaching strategies	15	20	2.00	4.00	3.45	.61	20	2.00	4.00	2.75	.72	20	2.00	4.00	2.90	.64
	16	20	3.00	4.00	3.65	.49	20	3.00	4.00	3.60	.50	20	3.00	4.00	3.40	.50
	17	20	3.00	4.00	3.75	.44	20	2.00	4.00	3.60	.60	20	2.00	4.00	3.45	.60
	18	20	2.00	4.00	3.35	.59	20	2.00	4.00	3.20	.70	20	2.00	4.00	3.00	.65
	19	20	2.00	4.00	3.25	.72	20	2.00	4.00	2.95	.76	20	2.00	4.00	2.80	.70
	20	19	2.00	4.00	3.32	.58	19	2.00	4.00	2.89	.66	19	1.00	4.00	2.74	.65
General teaching strategies	21	20	1.00	4.00	2.65	.93	20	1.00	4.00	2.20	.95	20	2.00	4.00	2.60	.68
	22	20	2.00	4.00	3.45	.61	20	2.00	4.00	3.15	.59	20	2.00	4.00	3.15	.67
	23	20	3.00	4.00	3.60	.50	20	2.00	4.00	3.30	.66	20	2.00	4.00	3.15	.67
	24	20	2.00	4.00	3.35	.75	20	2.00	4.00	3.15	.59	20	2.00	4.00	3.10	.72
	25	20	3.00	4.00	3.75	.44	20	3.00	4.00	3.65	.49	20	2.00	4.00	3.50	.61
	26	19	1.00	4.00	2.42	.69	19	1.00	3.00	2.21	.54	19	1.00	4.00	2.74	.93
Working with families	27	20	2.00	4.00	3.65	.59	20	3.00	4.00	3.65	.49	20	2.00	4.00	3.45	.61
	28	20	2.00	4.00	3.70	.57	20	2.00	4.00	3.40	.60	20	2.00	4.00	3.40	.68
	29	20	2.00	4.00	3.40	.60	20	2.00	4.00	3.05	.76	20	1.00	4.00	2.85	.81
	30	20	2.00	4.00	3.20	.62	20	1.00	4.00	2.65	.81	20	1.00	4.00	2.60	.75
	31	20	2.00	4.00	3.30	.57	20	1.00	4.00	2.85	.93	20	1.00	4.00	2.65	.81
	32	20	2.00	4.00	3.35	.59	20	1.00	4.00	2.90	.85	20	1.00	4.00	2.80	.83

Table 3-3. Table of specifications for the preliminary draft of the SETP-C.

Domain	Description	Sources of Questionnaire Items	N	Percentage
Teaching practices related to Building Nurturing and Responsive Relationships	Building positive relationships with children, families, and colleagues is the foundation for all other practices and the universal conditions that are necessary for promoting social-emotional competence and preventing and addressing challenging behavior of young children.	TPOT-P indicators under “Supportive Conversations with Children” TPOT-P indicators under “Collaborative Teaming” TPOT-P indicators under “Communicating with Families” China’s ELDG & <i>Guidance</i>	12	13.48%
Teaching practices related to Creating a High-Quality Supportive Classroom Environment	The provision of high quality environments and teaching practices support children’s engagement in classroom activities and routines.	TPOT-P indicators under “Schedules, Routines, and Activities” TPOT-P indicators under “Red Flags” subscale TPOT-P indicators under “Transitions between Activities” TPOT-P indicators under “Promoting Children’s Engagement” TPOT-P indicators under “Providing Directions” China’s ELDG & <i>Guidance</i>	18	20.22%
Teaching practices related to Instruction on Targeted Social or Emotional Skills	The provision of explicit instruction in social skills and emotional competencies for all children and the delivery of targeted skill instruction that is individualized and systematic for children who are at risk for developing challenging behavior or who have delays in social-emotional development.	What to Teach: TPOT-P Tier 2 indicators China’s ELDG & <i>Guidance</i> Systematic Review	20	22.47%
		How to Teach: TPOT-P Tier 2 indicators China’s ELDG & <i>Guidance</i> Systematic Review Existing instrument	22	24.71%
Total			42	47.19%

Table 3-3. Continued

Domain	Description	Sources of Questionnaire Items	<i>N</i>	Percentage
Teaching practices related to Addressing Challenging Behavior	The use of strategies for responding to challenging behavior when challenging behavior occurs and the implementation of comprehensive, assessment-based behavior support plans for children with persistent challenging behavior that is unresponsive to classroom-wide guidance procedures and the instruction of social and emotional skills.	TPOT-P indicators under “Using Effective Strategies to Respond to Challenging Behavior” TPOT-P indicators under “Supporting Children with Persistent Challenging Behavior”	11	12.36%
Teaching practices related to Supporting Family Use of Social, Emotional, and Behavioral Teaching Practices	The use of practices to support families to promote their children’s social-emotional development and preventing and addressing challenging behavior.	TPOT-P indicators under “Involving Families in Supporting Their Child’s Social-Emotional Development and Addressing Challenging Behavior”	6	6.74%

Note: TPOT-P = Teaching Pyramid Observation Tool for Preschool Classrooms-Pre-publication version (TPOT-P; Fox, Hemmeter, & Snyder, 2008).

Table 3-4. Demographic characteristics of participants in the content validation study.

	Variable	Number	Percentage (%)
Professional role	Principal	148	73.6
	Vice principal	39	19.4
	Teacher	14	7.0
	Normal school graduate ^a	2	1.0
Level of education	Associate's degree	31	15.3
	Bachelor's degree	165	81.7
	Master's degree	4	2.0
Major	Early childhood education	119	58.9
	Early childhood special education	1	.5
	Elementary education	21	10.4
	Education management and leadership	14	6.9
	More than two majors	30	14.9
	Other	17	8.4
Funding source for preschool	Public	176	86.7
	Private	19	9.4
	Other	8	3.9
Social-emotional curricula	No	174	88.3
	Yes	23	11.7

Note: ^a Normal school graduate is equivalent to high school graduate.

Table 3-5. Descriptive statistics and score distributions on the How Important section across 89 items.

Item	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Dis.	Cronbach's Alpha	Response Category Proportions (%)						Missing Data Rate
							1	2	3	4	5	6	
Item 1	204	5.13	1.21	1.46	.28	.99	2.5	2.0	6.4	11.3	25.0	52.9	.5%
Item 2	205	5.10	1.08	1.17	.38	.99	.5	2.0	8.3	12.2	30.2	46.8	.0%
Item 3	203	4.92	1.24	1.54	.43	.99	2.0	3.4	8.4	15.8	28.1	42.4	1.0%
Item 4	205	5.47	.83	.68	.41	.99	.0	.0	2.9	12.7	19.0	65.4	.0%
Item 5	204	5.50	.90	.81	.42	.99	.0	2.0	2.9	7.4	18.6	69.1	.5%
Item 6	204	5.31	.92	.85	.49	.99	0.5	.5	2.9	14.7	26.5	54.9	.5%
Item 7	204	5.04	1.05	1.10	.57	.99	.0	1.5	7.4	21.6	24.5	45.1	.5%
Item 8	205	4.61	1.27	1.62	.38	.99	2.0	3.9	13.7	23.9	24.9	31.7	.0%
Item 9	205	4.52	1.29	1.66	.49	.99	2.0	5.4	13.7	25.9	24.4	28.8	.0%
Item 10	201	4.91	1.23	1.52	.58	.99	3.0	1.5	6.5	22.4	23.9	42.8	2.0%
Item 11	204	5.36	.93	.86	.53	.99	.5	1.0	2.5	13.2	23.5	59.3	.5%
Item 12	203	5.22	1.03	1.06	.54	.99	1.0	1.5	3.0	16.7	24.6	53.2	1.0%
Item 13	204	4.34	1.47	2.16	.53	.99	3.9	7.8	20.1	15.7	23.5	28.9	.5%
Item 14	203	4.82	1.25	1.57	.62	.99	2.5	1.0	12.8	19.7	24.1	39.9	1.0%
Item 15	203	5.15	1.18	1.39	.59	.99	2.5	2.0	3.9	14.8	23.6	53.2	1.0%
Item 16	203	5.37	.88	.77	.58	.99	.0	.5	5.4	7.4	29.6	57.1	1.0%
Item 17	203	3.71	1.62	2.62	.54	.99	15.3	4.4	26.6	18.2	18.2	17.2	1.0%
Item 18	203	4.29	1.30	1.68	.34	.99	1.5	5.9	24.1	22.2	23.6	22.7	1.0%
Item 19	203	4.38	1.39	1.93	.50	.99	6.4	2.0	14.3	27.6	24.1	25.6	1.0%
Item 20	205	4.75	1.33	1.78	.59	.99	2.9	5.4	9.3	14.6	31.7	36.1	.0%
Item 21	202	4.32	1.44	2.06	.63	.99	3.5	8.9	17.3	19.3	24.3	26.7	1.5%
Item 22	199	4.79	1.22	1.49	.59	.99	2.0	3.0	9.0	21.1	29.1	35.7	2.9%
Item 23	204	5.15	1.11	1.24	.52	.99	1.5	2.0	5.9	11.3	29.9	49.5	.5%
Item 24	203	5.32	.93	.86	.59	.99	.5	1.5	3.0	9.4	32.5	53.2	1.0%
Item 25	204	5.14	1.09	1.20	.56	.99	1.0	2.0	6.4	12.7	28.4	49.5	.5%
Item 26	204	5.22	1.06	1.13	.48	.99	2.0	.0	4.4	14.7	25.5	53.4	.5%
Item 27	205	4.46	1.57	2.46	.59	.99	6.8	5.9	14.6	16.6	19.5	36.6	.0%
Item 28	204	4.18	1.38	1.91	.55	.99	5.4	6.4	16.7	27.5	24.5	19.6	.5%
Item 29	202	4.51	1.24	1.53	.64	.99	.5	5.9	13.4	31.2	19.8	29.2	1.5%
Item 30	202	4.56	1.27	1.62	.67	.99	3.0	4.0	11.4	24.8	29.7	27.2	1.5%
Item 31	202	4.60	1.32	1.74	.74	.98	3.5	3.0	14.4	19.3	29.2	30.7	1.5%
Item 32	204	4.63	1.43	2.04	.72	.98	3.9	6.9	8.8	20.1	23.5	36.8	.5%
Item 33	204	4.54	1.40	1.95	.67	.99	4.4	3.9	14.7	19.1	26.0	31.9	.5%
Item 34	205	4.37	1.44	2.06	.71	.98	5.4	5.4	15.1	22.4	24.4	27.3	.0%

Table 3-5. Continued

Item	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Dis.	Cronbach's Alpha	Response Category Proportions (%)						Missing Data Rate
							1	2	3	4	5	6	
Item 35	203	4.29	1.47	2.16	.73	.98	6.4	5.9	15.3	22.7	24.1	25.6	1.0%
Item 36	205	4.46	1.49	2.21	.75	.98	4.4	7.3	15.6	17.1	22.0	33.7	.0%
Item 37	203	4.57	1.53	2.34	.73	.98	6.9	3.4	14.3	14.3	23.2	37.9	1.0%
Item 38	204	4.33	1.44	2.07	.73	.98	4.9	6.9	15.7	22.1	24.0	26.5	.5%
Item 39	204	4.42	1.47	2.15	.77	.98	5.4	4.9	18.1	15.2	27.0	29.4	.5%
Item 40	203	4.72	1.32	1.75	.76	.98	3.4	4.4	7.9	19.7	29.6	35.0	1.0%
Item 41	204	4.50	1.41	2.00	.73	.98	4.9	4.9	12.7	20.6	27.0	29.9	.5%
Item 42	203	4.18	1.59	2.51	.72	.98	8.9	7.4	15.3	21.2	20.2	27.1	1.0%
Item 43	204	4.17	1.49	2.21	.75	.98	7.4	5.4	19.6	21.1	23.5	23.0	.5%
Item 44	203	4.39	1.51	2.27	.74	.98	6.9	5.4	14.3	17.2	27.1	29.1	1.0%
Item 45	204	4.32	1.44	2.08	.74	.98	5.9	4.9	15.2	26.5	20.1	27.5	.5%
Item 46	205	4.69	1.31	1.73	.78	.98	2.9	3.9	10.7	21.5	25.9	35.1	.0%
Item 47	205	4.60	1.32	1.75	.71	.98	2.9	5.4	10.2	22.9	27.3	31.2	.0%
Item 48	204	4.56	1.34	1.80	.79	.98	3.4	5.9	10.3	21.1	30.4	28.9	.5%
Item 49	204	4.67	1.38	1.90	.73	.98	3.9	3.9	12.7	15.2	28.9	35.3	.5%
Item 50	202	4.55	1.44	2.06	.80	.98	5.0	6.4	8.9	20.3	27.2	32.2	1.5%
Item 51	204	4.74	1.33	1.77	.73	.98	2.9	4.4	10.8	16.7	28.4	36.8	.5%
Item 52	204	4.89	1.25	1.56	.68	.99	1.5	2.9	12.3	14.7	26.0	42.6	.5%
Item 53	204	5.07	1.14	1.30	.72	.98	1.0	4.4	3.4	14.7	30.9	45.6	.5%
Item 54	205	5.05	1.12	1.25	.73	.98	1.0	3.4	4.9	15.1	31.7	43.9	.0%
Item 55	203	4.54	1.39	1.93	.73	.98	6.4	3.0	8.4	22.7	31.5	28.1	1.0%
Item 56	203	4.56	1.36	1.84	.77	.98	3.4	5.4	11.8	21.2	27.6	30.5	1.0%
Item 57	205	5.02	1.06	1.13	.71	.98	1.0	1.0	6.8	19.0	30.2	42.0	.0%
Item 58	204	4.58	1.32	1.73	.75	.98	2.9	4.4	12.7	22.1	27.5	30.4	.5%
Item 59	203	4.36	1.42	2.02	.70	.98	4.4	7.9	13.8	19.2	30.0	24.6	1.0%
Item 60	205	4.40	1.50	2.25	.74	.98	7.8	3.9	12.7	21.0	25.9	28.8	.0%
Item 61	204	4.91	1.18	1.40	.73	.98	1.5	3.4	7.8	15.7	33.3	38.2	.5%
Item 62	203	4.67	1.28	1.65	.76	.98	2.0	5.9	9.9	19.2	31.5	31.5	1.0%
Item 63	204	4.35	1.46	2.12	.71	.98	6.9	4.9	12.7	23.0	27.0	25.5	.5%
Item 64	203	4.61	1.28	1.65	.69	.98	2.0	5.4	10.8	24.6	26.1	31.0	1.0%
Item 65	202	4.86	1.10	1.21	.76	.98	1.0	2.5	8.4	17.8	38.1	32.2	1.5%
Item 66	203	4.85	1.19	1.41	.71	.98	2.0	3.0	5.9	23.6	28.1	37.4	1.0%
Item 67	202	4.77	1.23	1.52	.75	.98	2.0	5.0	5.4	24.3	28.7	34.7	1.5%
Item 68	203	5.04	1.09	1.18	.72	.98	.5	3.0	5.9	16.3	31.0	43.3	1.0%
Item 69	203	4.92	1.13	1.28	.71	.98	1.0	3.0	7.9	16.7	34.0	37.4	1.0%

Table 3-5. Continued

Item	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Dis.	Cronbach's Alpha	Response Category Proportions (%)						Missing Data Rate
							1	2	3	4	5	6	
Item 70	203	4.74	1.21	1.45	.69	.98	1.5	4.9	7.4	22.2	32.5	31.5	1.0%
Item 71	203	4.27	1.39	1.93	.65	.99	3.9	7.4	17.2	23.6	24.6	23.2	1.0%
Item 72	203	4.84	1.16	1.36	.65	.99	1.5	3.0	7.9	20.7	32.0	35.0	1.0%
Item 73	201	4.85	1.18	1.39	.67	.99	1.5	2.5	8.5	22.4	27.4	37.8	2.0%
Item 74	203	4.64	1.31	1.72	.61	.99	2.5	3.9	14.8	17.7	28.6	32.5	1.0%
Item 75	203	4.61	1.27	1.61	.56	.99	2.5	5.4	8.4	24.6	30.5	28.6	1.0%
Item 76	203	4.79	1.21	1.46	.73	.98	1.0	2.5	14.8	16.3	29.1	36.5	1.0%
Item 77	204	4.96	1.12	1.26	.65	.99	1.0	2.0	8.8	16.7	31.4	40.2	.5%
Item 78	202	4.99	1.04	1.08	.64	.99	.0	3.0	6.4	17.3	35.1	38.1	1.5%
Item 79	203	4.80	1.21	1.46	.65	.99	1.5	3.4	9.4	21.2	28.6	36.0	1.0%
Item 80	203	4.58	1.40	1.95	.68	.99	3.9	5.9	8.9	25.1	21.7	34.5	1.0%
Item 81	204	4.53	1.31	1.72	.63	.99	2.9	4.4	13.2	24.0	26.5	28.9	.5%
Item 82	202	4.76	1.22	1.50	.67	.99	1.0	4.5	9.9	23.3	25.2	36.1	1.5%
Item 83	202	4.54	1.35	1.83	.59	.99	1.5	7.9	13.9	20.3	24.3	32.2	1.5%
Item 84	203	4.99	1.12	1.25	.67	.99	.5	4.4	4.4	17.7	32.0	40.9	1.0%
Item 85	202	4.81	1.06	1.12	.68	.99	.5	1.0	11.9	20.8	35.6	30.2	1.5%
Item 86	201	4.87	1.09	1.18	.65	.99	1.0	2.0	8.0	20.4	35.8	32.8	2.0%
Item 87	204	4.82	1.11	1.22	.65	.99	1.5	2.0	7.8	21.1	36.8	30.9	.5%
Item 88	203	4.61	1.32	1.75	.68	.99	2.5	5.9	11.3	20.2	29.1	31.0	1.0%
Item 89	202	4.60	1.37	1.86	.62	.99	2.5	5.4	14.9	18.8	23.8	34.7	1.5%

Note: Dis. = item discrimination (i.e., corrected item-total correlation), Cronbach's Alpha = Cronbach's alpha if item deleted.

Table 3-6. Descriptive statistics and score distributions on the How Culturally Relevant section across 89 items.

Item	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Dis.	Cronbach's Alpha	Response Category Proportions (%)						Missing Data Rate
							1	2	3	4	5	6	
Item 1	202	4.81	1.18	1.38	.41	.99	1.0	4.0	8.4	21.3	30.7	34.7	1.5%
Item 2	201	4.80	1.22	1.48	.39	.99	1.5	2.5	11.4	21.9	24.9	37.8	2.0%
Item 3	203	4.70	1.31	1.72	.47	.99	3.4	3.0	10.3	21.7	26.1	35.5	1.0%
Item 4	202	5.06	1.12	1.25	.57	.99	.0	3.5	8.4	12.9	28.7	46.5	1.5%
Item 5	205	5.25	1.02	1.03	.50	.99	.0	3.5	8.4	12.9	28.7	46.5	.0%
Item 6	203	5.08	1.08	1.16	.54	.99	1.0	1.5	5.9	17.2	28.6	45.8	1.0%
Item 7	202	4.86	1.18	1.40	.53	.99	1.5	.5	13.4	19.8	25.2	39.6	1.5%
Item 8	204	4.48	1.33	1.77	.50	.99	2.0	6.4	15.7	23.0	24.0	28.9	.5%
Item 9	204	4.18	1.45	2.10	.58	.99	6.4	6.9	17.2	23.0	25.5	21.1	.5%
Item 10	202	4.74	1.33	1.78	.67	.99	3.0	4.5	8.4	23.3	21.8	39.1	1.5%
Item 11	205	5.17	1.09	1.19	.59	.99	.0	3.4	5.9	14.1	23.4	53.2	.0%
Item 12	204	4.94	1.19	1.42	.60	.99	1.5	3.4	5.9	21.1	25.5	42.6	.5%
Item 13	201	4.06	1.44	2.07	.58	.99	4.5	10.0	23.4	19.4	22.9	19.9	2.0%
Item 14	202	4.58	1.32	1.75	.60	.99	3.0	4.5	11.9	24.3	24.8	31.7	1.5%
Item 15	203	4.90	1.21	1.46	.59	.99	2.5	1.0	9.4	19.2	27.1	40.9	1.0%
Item 16	202	4.90	1.20	1.44	.49	.99	1.0	3.0	11.4	15.3	28.7	40.6	1.5%
Item 17	204	3.79	1.63	2.66	.47	.99	14.2	5.4	24.0	18.6	18.6	19.1	.5%
Item 18	204	3.91	1.42	2.02	.51	.99	5.4	10.3	25.5	22.1	20.1	16.7	.5%
Item 19	202	4.20	1.41	2.00	.59	.99	6.9	4.0	17.8	25.2	25.7	20.3	1.5%
Item 20	203	4.67	1.33	1.77	.57	.99	3.4	4.9	9.4	17.2	33.0	32.0	1.0%
Item 21	200	4.23	1.47	2.17	.65	.99	5.0	9.0	18.0	18.5	25.5	24.0	2.4%
Item 22	198	4.58	1.30	1.68	.66	.99	2.0	5.6	13.1	20.7	29.3	29.3	3.4%
Item 23	204	4.90	1.19	1.40	.63	.99	1.0	2.9	10.3	17.2	28.4	40.2	.5%
Item 24	204	4.94	1.15	1.33	.64	.99	1.0	2.5	10.3	14.2	32.4	39.7	.5%
Item 25	204	4.95	1.19	1.43	.62	.99	1.5	2.5	8.8	17.6	26.0	43.6	.5%
Item 26	205	4.71	1.36	1.85	.59	.99	3.9	3.4	10.2	20.5	23.9	38.0	.0%
Item 27	204	4.26	1.54	2.38	.56	.99	6.4	8.3	17.2	17.2	22.5	28.4	.5%
Item 28	204	4.21	1.28	1.65	.49	.99	3.9	5.9	15.7	30.9	27.0	16.7	.5%
Item 29	201	4.41	1.23	1.52	.55	.99	2.0	3.0	18.9	27.9	24.4	23.9	2.0%
Item 30	202	4.42	1.27	1.62	.61	.99	2.5	5.9	12.9	27.7	28.2	22.8	1.5%
Item 31	200	4.55	1.26	1.59	.69	.99	1.5	4.5	16.0	22.0	28.0	28.0	2.4%
Item 32	201	4.52	1.33	1.77	.65	.99	3.0	5.0	14.4	20.9	28.4	28.4	2.0%
Item 33	203	4.42	1.33	1.77	.68	.99	3.0	3.0	22.2	20.2	24.6	27.1	1.0%
Item 34	203	4.21	1.40	1.96	.68	.99	5.4	4.9	19.7	25.6	22.2	22.2	1.0%

Table 3-6. Continued

Item	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Dis.	Cronbach's Alpha	Response Category Proportions (%)						Missing Data Rate
							1	2	3	4	5	6	
Item 35	202	4.11	1.48	2.18	.67	.99	7.4	5.9	19.3	24.3	21.3	21.8	1.5%
Item 36	203	4.21	1.50	2.24	.77	.99	5.9	7.4	20.7	17.2	23.6	25.1	1.0%
Item 37	202	4.36	1.49	2.23	.72	.99	5.9	5.4	18.3	16.8	24.3	29.2	1.5%
Item 38	203	4.14	1.44	2.06	.69	.99	5.4	6.9	22.2	20.2	24.1	21.2	1.0%
Item 39	202	4.22	1.45	2.09	.74	.99	6.4	5.4	17.8	22.8	24.8	22.8	1.5%
Item 40	204	4.57	1.36	1.84	.70	.99	3.9	4.9	10.8	21.6	28.4	30.4	.5%
Item 41	205	4.35	1.43	2.04	.64	.99	5.4	6.8	12.7	22.9	27.3	24.9	.0%
Item 42	204	3.99	1.57	2.45	.70	.99	9.3	8.3	20.1	20.6	20.1	21.6	.5%
Item 43	204	3.99	1.48	2.19	.74	.99	8.3	5.4	24.5	21.1	22.1	18.6	.5%
Item 44	205	4.25	1.48	2.18	.71	.99	6.3	6.3	17.6	19.5	25.9	24.4	.0%
Item 45	203	4.21	1.40	1.96	.74	.99	4.9	6.9	17.2	26.1	23.2	21.7	1.0%
Item 46	204	4.48	1.41	1.99	.76	.99	4.4	5.9	12.3	22.5	25.0	29.9	.5%
Item 47	203	4.43	1.39	1.92	.73	.99	3.9	6.9	12.8	20.7	29.6	26.1	1.0%
Item 48	205	4.33	1.38	1.90	.81	.99	3.9	7.8	14.1	22.4	29.3	22.4	.0%
Item 49	203	4.43	1.45	2.11	.73	.99	4.9	6.9	13.8	17.2	28.6	28.6	1.0%
Item 50	201	4.32	1.44	2.07	.80	.99	5.5	6.0	16.9	18.9	28.4	24.4	2.0%
Item 51	204	4.43	1.40	1.97	.76	.99	3.9	5.9	16.2	19.6	26.0	28.4	.5%
Item 52	203	4.62	1.38	1.91	.68	.99	3.4	4.4	13.8	19.2	23.6	35.5	1.0%
Item 53	203	4.83	1.27	1.61	.71	.99	2.0	6.4	4.4	18.2	31.5	37.4	1.0%
Item 54	203	4.86	1.20	1.44	.74	.99	1.5	4.4	4.4	25.1	25.6	38.9	1.0%
Item 55	202	4.42	1.39	1.93	.64	.99	5.9	4.0	10.9	26.2	27.7	25.2	1.5%
Item 56	203	4.47	1.32	1.74	.71	.99	3.4	6.4	9.9	24.6	31.5	24.1	1.0%
Item 57	202	4.91	1.11	1.22	.74	.99	1.0	2.5	5.9	23.3	30.2	37.1	1.5%
Item 58	204	4.40	1.41	1.98	.80	.99	3.9	6.9	15.7	19.6	27.0	27.0	.5%
Item 59	202	4.24	1.44	2.07	.74	.99	4.5	9.9	14.4	23.3	24.8	23.3	1.5%
Item 60	203	4.24	1.50	2.26	.78	.99	6.4	8.4	14.3	22.7	22.7	25.6	1.0%
Item 61	203	4.52	1.35	1.82	.76	.99	3.4	2.5	18.7	20.7	23.6	31.0	1.0%
Item 62	204	4.50	1.35	1.82	.80	.99	3.4	4.9	13.7	23.5	25.5	28.9	.5%
Item 63	203	4.13	1.45	2.11	.72	.99	7.4	5.9	17.7	24.1	25.1	19.7	1.0%
Item 64	204	4.35	1.39	1.93	.74	.99	2.9	6.4	19.6	23.5	19.1	28.4	.5%
Item 65	201	4.59	1.28	1.64	.79	.99	1.5	7.0	10.4	22.4	29.4	29.4	2.0%
Item 66	204	4.64	1.24	1.53	.74	.99	2.0	2.0	14.7	25.5	23.5	32.4	.5%
Item 67	199	4.60	1.34	1.80	.76	.99	3.0	5.0	11.6	22.6	25.1	32.7	2.9%
Item 68	203	4.78	1.22	1.49	.79	.99	.0	5.9	10.3	20.7	25.6	37.4	1.0%
Item 69	202	4.65	1.30	1.69	.75	.99	2.0	5.4	11.9	19.3	28.7	32.7	1.5%

Table 3-6. Continued

Item	<i>n</i>	<i>M</i>	<i>SD</i>	Variance	Dis.	Cronbach's Alpha	Response Category Proportions (%)						Missing Data Rate
							1	2	3	4	5	6	
Item 70	204	4.64	1.19	1.42	.70	.99	.5	4.4	13.7	22.5	29.4	29.4	.5%
Item 71	202	4.15	1.42	2.01	.63	.99	4.5	8.4	20.3	22.3	23.3	21.3	1.5%
Item 72	202	4.70	1.24	1.55	.60	.99	2.0	3.0	12.9	20.3	29.2	32.7	1.5%
Item 73	200	4.56	1.32	1.75	.72	.99	2.0	7.0	11.0	23.5	26.0	30.5	2.4%
Item 74	202	4.51	1.37	1.88	.64	.99	4.5	4.5	11.4	24.8	25.2	29.7	1.5%
Item 75	204	4.52	1.31	1.72	.54	.99	2.9	4.4	14.2	22.1	28.4	27.9	.5%
Item 76	202	4.61	1.31	1.72	.69	.99	2.0	5.0	14.9	18.8	27.2	32.2	1.5%
Item 77	203	4.84	1.19	1.40	.65	.99	1.0	3.0	11.3	17.7	30.0	36.9	1.0%
Item 78	203	4.84	1.14	1.29	.70	.99	.0	4.4	8.9	20.2	31.0	35.5	1.0%
Item 79	200	4.43	1.44	2.09	.66	.99	4.0	7.0	15.5	20.0	22.5	31.0	2.4%
Item 80	204	4.21	1.51	2.29	.62	.99	6.4	8.3	15.7	24.5	18.1	27.0	.5%
Item 81	203	4.15	1.44	2.07	.63	.99	4.4	8.9	19.7	24.6	18.7	23.6	1.0%
Item 82	203	4.37	1.37	1.89	.67	.99	2.5	8.4	15.8	22.7	24.1	26.6	1.0%
Item 83	200	4.22	1.40	1.96	.60	.99	2.5	9.5	21.0	22.5	20.0	24.5	2.4%
Item 84	203	4.66	1.30	1.68	.72	.99	1.5	4.9	14.8	18.2	26.6	34.0	1.0%
Item 85	202	4.44	1.26	1.58	.72	.99	1.0	5.9	17.8	23.3	27.2	24.8	1.5%
Item 86	202	4.56	1.27	1.62	.70	.99	1.5	5.9	13.9	20.3	30.7	27.7	1.5%
Item 87	202	4.47	1.32	1.73	.70	.99	2.0	6.4	16.3	19.8	29.2	26.2	1.5%
Item 88	204	4.17	1.44	2.07	.74	.99	5.9	6.4	19.6	23.0	23.0	22.1	.5%
Item 89	200	4.19	1.52	2.32	.68	.99	6.0	10.5	14.0	23.5	20.0	26.0	2.4%

Note: Dis. = item discrimination (i.e., corrected item-total correlation), Cronbach's Alpha = Cronbach's alpha if item deleted.

Table 3-7. Four proposed confirmatory factor analytic models.

	Model 1: Five-factor	Model 2: Six-factor (A)	Model 3: Six-factor (B)	Model 4: Seven-factor
Nurturing and Responsive Relationships	Item 1 to Item 9	Item 1 to Item 9	Item 1 to Item 9	Item 1 to Item 9
Supportive Classroom Environment	Item 10 to Item 20	Item 10 to Item 20	Item 10 to Item 20	Item 10 to Item 20
Instruction on Targeted Social or Emotional Skills	Item 21, Item 22, Item 23, Item 24, Item 25, Item 26, Item 27, Item 28, Item 29, Item 30, Item 31, Item 32, Item 33, Item 34, Item 35, Item 36, Item 37, Item 38, Item 39, Item 40, Item 41, Item 42, Item 43, Item 44, Item 45, Item 46, Item 47, Item 48, Item 49, Item 50, Item 51, Item 52, Item 53	Item 21, Item 22, Item 23, Item 24, Item 25, Item 26, Item 27, Item 28, Item 29, Item 30, Item 31, Item 32, Item 33, Item 34, Item 35, Item 36, Item 37, Item 38, Item 39, Item 40, Item 41, Item 42, Item 43, Item 44, Item 45, Item 46, Item 47, Item 48, Item 49, Item 50, Item 51, Item 52, Item 53	--	--
Social-Emotional Instructional Content	--	--	Item 21, Item 22, Item 23, Item 24, Item 25, Item 26, Item 27, Item 28, Item 29, Item 30, Item 31, Item 32, Item 33, Item 34, Item 35,	Item 21, Item 22, Item 23, Item 24, Item 25, Item 26, Item 27, Item 28, Item 29, Item 30, Item 31, Item 32, Item 33, Item 34, Item 35,
Social-Emotional Instructional Strategies	--	--	Item 36, Item 37, Item 38, Item 39, Item 40, Item 41, Item 42, Item 43, Item 44, Item 45, Item 46, Item 47, Item 48, Item 49, Item 50, Item 51, Item 52, Item 53	Item 36, Item 37, Item 38, Item 39, Item 40, Item 41, Item 42, Item 43, Item 44, Item 45, Item 46, Item 47, Item 48, Item 49, Item 50, Item 51, Item 52, Item 53
Addressing Challenging Behavior	Item 54, Item 55, Item 56, Item 57, Item 58, Item 59, Item 60, Item 61, Item 62, Item 63	--	Item 54, Item 55, Item 56, Item 57, Item 58, Item 59, Item 60, Item 61, Item 62, Item 63	--
Responses to Challenging Behavior	--	Item 54, Item 55, Item 56, Item 57, Item 58	--	Item 54, Item 55, Item 56, Item 57, Item 58
Interventions for Children with Persistent Challenging Behavior	--	Item 59, Item 60, Item 61, Item 62, Item 63,	--	Item 59, Item 60, Item 61, Item 62, Item 63,
Supporting Family	Item 64 to Item 70	Item 64 to Item 70	Item 64 to Item 70	Item 64 to Item 70

Table 3-8. Characteristics of Chinese preschool teachers.

Variable	Categories of Variable	Analytic Sample (<i>N</i> = 1,599)		Excluded Sample (<i>N</i> = 488)		Country ^a
		Number	Percentage	Number	Percentage	
City of preschool	Beijing	730	45.7	176	36.1	--
	Ningbo	869	54.3	270	55.3	
	Other cities	0	.0	42	8.6	
Region of preschool	Urban	1135	71.0	--	--	83.4%
	Rural	464	29.0	--	--	16.6%
Funding source for preschool	Public	1304	81.6	377	77.3	--
	Private	295	18.4	109	22.3	
Quality rating of preschool	Excellent	714	44.7	242	49.6	--
	Good	738	46.2	199	40.8	
	No Rating	147	9.2	45	9.2	
Role of teacher	Lead Teacher	813	50.8	250	51.2	--
	Assistant Teacher	569	35.6	173	35.5	
	Others	217	13.6	65	13.3	
Professional title	Yes	990	61.9	316	64.7	25.9%
	No	608	38.0	172	35.2	74.1%
Education	Bachelor or Above	1008	63.0	309	63.3	19.9%
	Below Associate	52	3.3	13	2.6	23.5%
	Associate	539	33.7	166	34.0	56.7%
Major	ECE	1442	90.2	455	93.1	67.6%
	Not ECE	157	9.8	33	6.7	32.4%
Certification	Yes	1524	95.3	463	94.9	--
	No	75	4.7	25	5.1	
Child age	3-4 years	445	27.8	126	25.8	--
	4-5 years	470	29.4	148	30.3	
	5-6 years	460	28.8	137	28.1	
	6-7 years	200	12.5	69	14.1	
	Mixed ages	23	1.4	7	1.4	
Inclusion of Children with disabilities	Yes	256	16.0	70	14.3	--
	No	1340	83.8	416	85.2	
Enrollment of Children with persistent challenging behavior	Yes	1013	63.4	270	55.3	--
	No	574	35.9	214	43.8	
Social-emotional curriculum	Yes	88	5.5	22	4.5	--
	No	1511	94.5	465	95.3	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Years of teaching experience	N/A (continuous)	8.6	7.7	7.8	7.3	--
Child-to-teacher ratio	N/A (continuous)	10.3:1	3.1:1	10:2:1	3.0:1	--

Note: ^a Percentage data were retrieved from the 2016 Educational Statistics Yearbook of China (Department of Development & Planning, 2017).

Table 3-9. Definition and codes for each demographic variable.

Level	Variable	Definition	Type of Variable	Scoring on Sojump/Excel	Coding in SPSS/Mplus
Level 1	Role of teacher	The primary instructional role that a teacher fills in a preschool classroom.	Categorical	1 = Lead teacher 2 = Assistant teacher 3 = Other	Dummy coded ("Lead teacher" as reference group)
Level 1	Professional title	The level of professional title that a teacher holds approved by the administrative department under the people's government. According to the <i>Guidance on the Reform of Elementary and Middle-School Teachers' Professional Titles</i> (Ministry on Human Resources and Social Security, 2015), preschool teachers' professional titles are currently classified into five levels.	Categorical	1 = None 2 = Level 3 3 = Level 2 4 = Level 1 5 = Senior 1 6 = Senior 2	0 = Holds a professional title 1 = Does not hold any professional title
Level 1	Level of education	The highest level of preservice education that a teacher has completed.	Categorical	1 = High school diploma or below 2 = Normal school graduate 3 = Associate's degree 4 = Bachelor's degree 5 = Master's degree 6 = Doctoral degree	Dummy coded ("Bachelor's degree or above" as reference group)
Level 1	Major	The academic discipline to which a teacher formally committed and pursued for a degree.	Categorical	1 = Early childhood education 2 = Special education 3 = Elementary education 4 = Art education 5 = Psychology 6 = Other	0 = Early childhood education 1 = Others than early childhood education
Level 1	Certification	Whether a teacher holds a certification in early childhood education	Categorical	1 = Yes 2 = No	0 = Yes 1 = No
Level 1	Years of teaching experience	The length of experience in year(s) that an individual has been in a paid teaching position as a preschool teacher.	Continuous	Number	Number
Level 1	Child age	The age group of most of the children enrolled in a preschool classroom.	Categorical	1 = 3- to 4-year olds 2 = 4- to 5-year olds 3 = 5- to 6-year olds 4 = 6- to 7-year olds 5 = Mixed ages	Dummy coded ("3- to 4-year old" as reference group)

Table 3-9. Continued

Level	Variable	Definition	Type of Variable	Scoring on Sojump/Excel	Coding in SPSS/Mplus
Level 1	Child-to-teacher ratio	The number of children enrolled in a preschool classroom divided by the number of full-time teachers who are employed and assigned to that classroom during regular days.	Continuous	Number	Number
Level 1	Inclusion of Children with disabilities	Whether a preschool classroom is currently enrolling at least one child with disabilities.	Categorical	1 = No 2 = Yes	0 = Yes 1 = No
Level 1	Enrollment of Children with persistent challenging behavior	Whether a preschool classroom is currently enrolling at least one child who exhibits persistent challenging behavior.	Categorical	Number	0 = Yes 1 = No
Level 1	Social-emotional curriculum	Whether a teacher is currently implementing a social-emotional curriculum in the classroom.	Categorical	1 = No 2 = Yes	0 = Yes 1 = No
Level 2	City of preschool	The city where a preschool is located.	Categorical	(Based on the information from the sampling frame)	0 = Beijing 1 = Ningbo
Level 2	Region of preschool	The area where a preschool is located, according to the State's Council's urban-rural classification (National Bureau of Statistics, 2006).	Categorical	(Based on the information from the sampling frame)	0 = Urban 1 = Rural
Level 2	Funding source for preschool	The main source of funding that a preschool is receiving.	Categorical	1 = Public 2 = Private (Also confirmed with the information from the sampling frame)	0 = Public 1 = Private
Level 2	Quality rating of preschool	The level of quality of a preschool as rated by <i>Provincial Preschool Quality Rating System</i> .	Categorical	1 = Excellent 2 = Good 3 = Unrated (Also confirmed with the information from the sampling frame)	Dummy coded ("Excellent" as reference group)

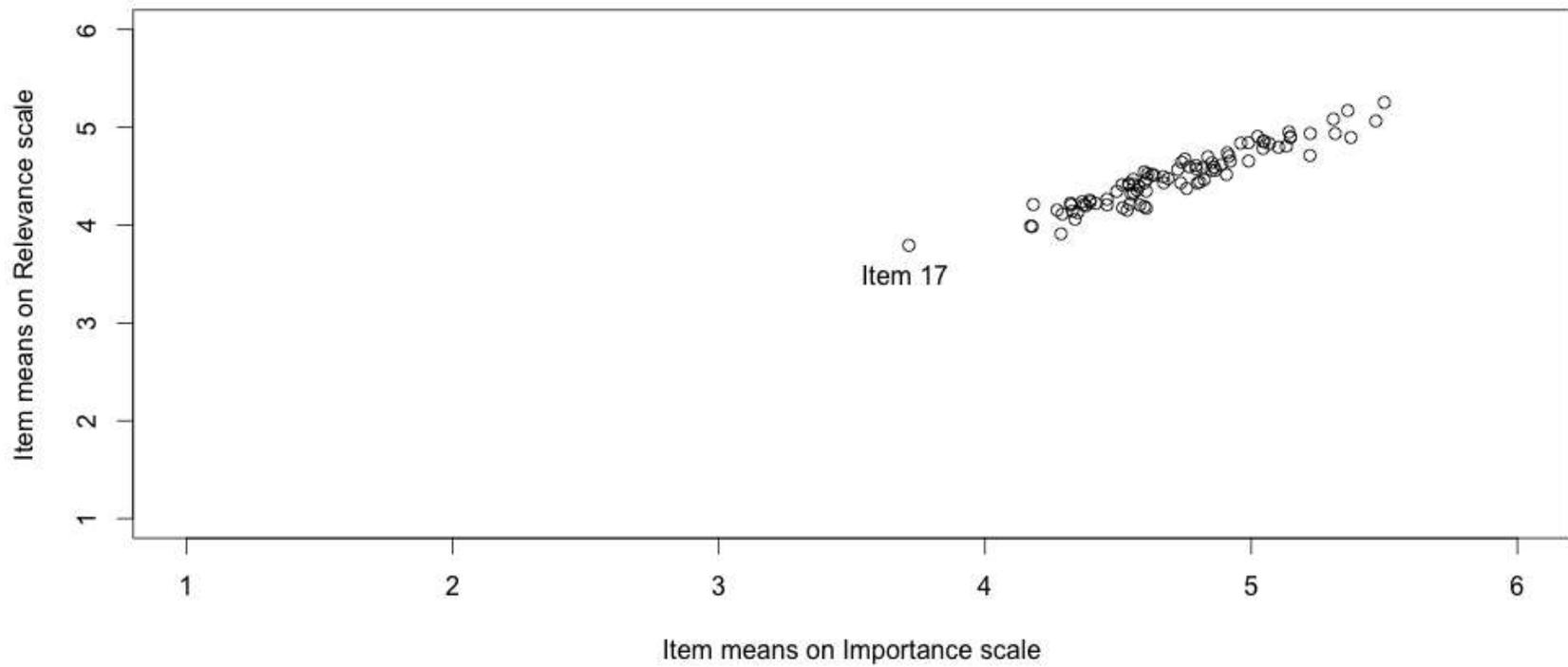


Figure 3-1. Correlation of item mean scores on the How Important section and item mean scores on the How Culturally Relevant section.

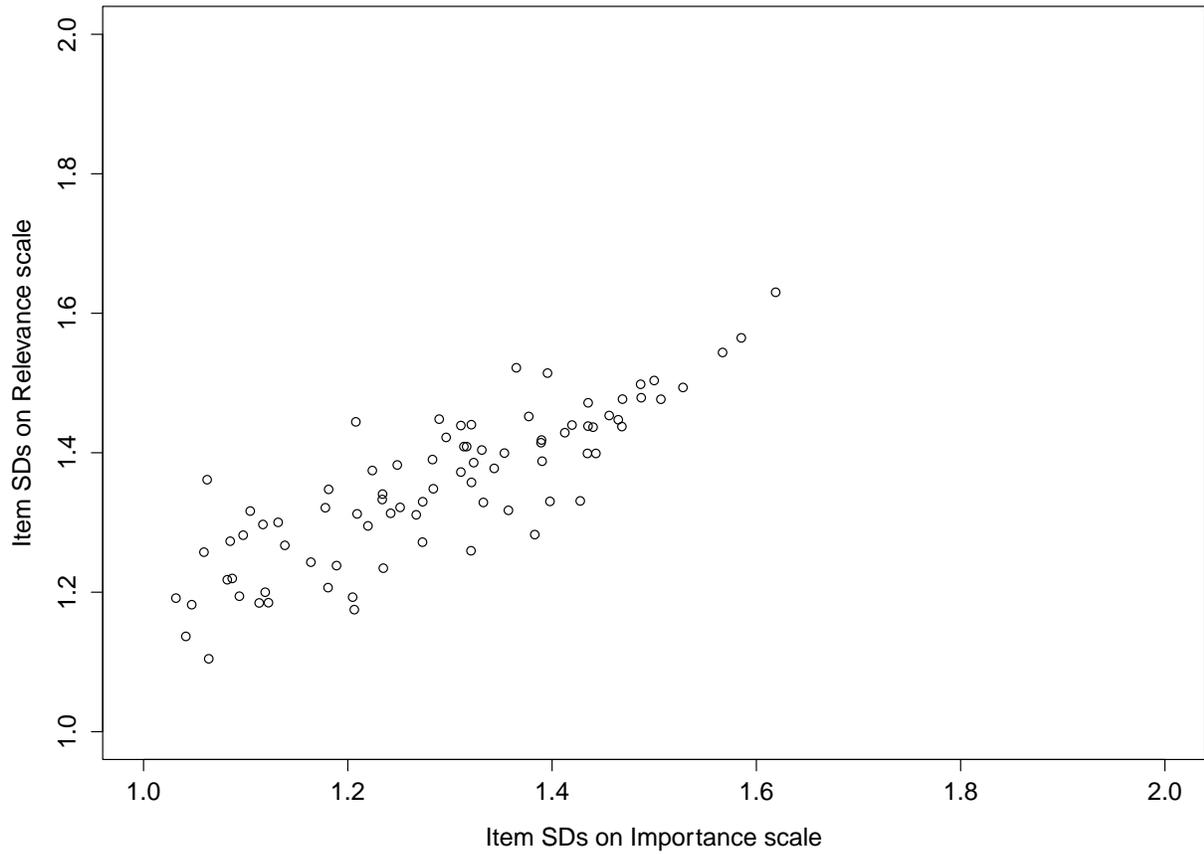


Figure 3-2. Correlation of item standard deviations on the How Important section and item standard deviations on the How Culturally Relevant section.

CHAPTER 4 RESULTS

In the present study, the SETP-C was developed and initially validated, and a cross-sectional descriptive survey design was used to examine Chinese preschool teachers' perspectives about social, emotional, and behavioral teaching practices aligned with the *Pyramid Model* and two Chinese national early childhood learning standards documents. Data to address four research questions were obtained from the analytic sample of 1,599 Chinese teachers across 120 preschools in Beijing and Ningbo by using the SETP-C. Findings are presented below with respect to each research question.

Research Question 1

The purpose of the first research question was to examine validity and reliability evidence of SETP-C scores for the present study sample of 1,599 Chinese preschool teachers. A series of CFAs were conducted to evaluate the adequacy of fit of the four factor models proposed for the present study in *Mplus* version 7.4 (Muthén & Muthén, 1998-2017). Item responses on the SETP-C were specified to be on an ordered categorical scale (i.e., 6-point Likert-type scale) and the CFAs were estimated using diagonally WLSMV estimation. Cronbach's alpha and omega coefficients were then computed for each latent variable subscale based on the best fitting CFA model to provide estimates of score reliability evidence.

Score Validity Evidence for the SETP-C

Tables 4-1 and 4-2 summarize the model fit indices for the four CFA models on the How Often section and How Confident section, respectively. The chi-square statistics for all the models were significant. The chi-square test is a popular criterion for

examining model fit, and an insignificant result is expected. However, the significance of the chi-square test may not indicate bad model fit, because there is a tendency for the chi-square test to result in rejection of a well-fitting model given large sample sizes (Bentler & Bonett, 1980; Jöreskog & Sörbom, 1993). In line with the recommendations of Bollen and Long (1993), model fit indices of the RMSEA, CFI, and TLI were used in addition to the chi-square statistic. The cut-off criteria described by Hu and Bentler (1999) suggests the RMSEA value of .06 or less and CFI and TLI values of .95 or greater indicate good model fit.

As shown in Tables 4-1 and 4-2, the RMSEA, CFI, and TLI estimates for the seven-factor model met the recommended criteria, indicating adequate fit of the model to the data on both the How Often (RMSEA = .044, CFI = .966, TLI = .965) and How Confident sections (RMSEA = .042, CFI = .968, TLI = .967). When compared with the other three models, the seven-factor model had the lowest RMSEA value, and the highest CFI and TLI values.

Given this evidence, it was determined that the seven-factor model served as the baseline model against which all other models were compared using chi-square difference model comparison tests. The comparisons of the seven-factor model with the other three models revealed that the seven-factor model explained the data better than the others in this sample of Chinese preschool teachers, on both the How Often and How Confident sections. Specifically, on the How Often section, there was a statistically significant improved fit for the seven-factor model when compared with the five-factor model, $\Delta\chi^2(11) = 2496.849, p < .001$; first six-factor model (A), $\Delta\chi^2(6) = 1036.162, p < .001$; and second six-factor model (B), $\Delta\chi^2(6) = 1676.009, p < .001$. The seven-factor

model was found to be practically a better fit than the other three models, with a ΔTLI of .043, .016, and .031 respectively.

With respect to the How Confident section, the seven-factor model demonstrated a statistically and practically significant improvement in model fit as compared to the five-factor model, $\Delta\chi^2(11) = 2645.78$, $p < .001$, $\Delta TLI = .041$; first six-factor model (A), $\Delta\chi^2(6) = 958.617$, $p < .001$, $\Delta TLI = .013$; and second six-factor model (B), $\Delta\chi^2(6) = 1969.970$, $p < .001$, $\Delta TLI = .031$.

From these results, it appears that the seven-factor model best represented the internal structure of the SETP-C in the present study and was ultimately chosen because of its conceptual and statistical soundness. Therefore, all the subsequent data analyses were based on the results of this best fitting model. Seventy items on the SETP-C were arranged into seven dimensions of the construct of interest (i.e., social, emotional, and behavioral teaching practices). These seven latent variable subscales were labeled: (a) Nurturing and Responsive Relationships ($v^1 = 9$), (b) Supportive Classroom Environment ($v = 11$), (c) Social-Emotional Instructional Content ($v = 15$), (d) Social-Emotional Instructional Strategies ($v = 18$), (e) Responses to Challenging Behavior ($v = 5$), (f) Interventions for Children with Persistent Challenging Behavior ($v = 5$), and (g) Supporting Family Use of Social, Emotional, and Behavioral Teaching Practices ($v = 7$).

The standardized factor loadings for each latent variable based on the seven-factor model are displayed in Tables 4-3 and 4-4. Regarding factor loadings on the How Often section, all were statistically significant. Standardized factor loadings for the

¹ v represents the number of questionnaire items associated with each latent variable subscale.

Nurturing and Responsive Relationships subscale ranged from .586 to .847, standardized factor loadings for the Supportive Classroom Environment subscale ranged from .668 to .836, standardized factor loadings for the Social-Emotional Instructional Content subscale ranged from .801 to .894, standardized factor loadings for the Social-Emotional Instructional Strategies subscale ranged from .645 to .881, standardized factor loadings for the Responses to Challenging Behavior subscale ranged from .841 to .898, standardized factor loadings for the Interventions for Children with Persistent Challenging Behavior subscale ranged from .832 to .950, and standardized factor loadings for the Supporting Family subscale ranged from .807 to .939.

With respect to the standardized factor loadings on the How Confident section, all exceeded .640 and were statistically significant. Standardized factor loadings for the Nurturing and Responsive Relationships subscale ranged from .643 to .852, standardized factor loadings for the Supportive Classroom Environment subscale ranged from .697 to .856, standardized factor loadings for the Social-Emotional Instructional Content subscale ranged from .817 to .909, standardized factor loadings for the Social-Emotional Instructional Strategies subscale ranged from .712 to .886, standardized factor loadings for the Responses to Challenging Behavior subscale ranged from .853 to .912, standardized factor loadings for the Interventions for Children with Persistent Challenging Behavior subscale ranged from .848 to .962, and standardized factor loadings for the Supporting Family subscale ranged from .824 to .939.

Score Reliability Evidence for the SETP-C

Cronbach's alpha and omega coefficients for the seven latent variable subscales are shown in Table 4-5. Calculations of subscales on the How Often section yielded an alpha coefficient of .875 on the Nurturing and Responsive Relationships subscale, .917 on the Supportive Classroom Environment subscale, .964 on the Social-Emotional Instructional Content subscale, .962 on the Social-Emotional Instructional Strategies subscale, .914 on the Responses to Challenging Behavior subscale, .909 on the Interventions for Children with Persistent Challenging Behavior subscale, and .948 on the Supporting Family subscale. For each latent variable subscale, the omega coefficient was slightly higher than the Cronbach's alpha coefficient. The omega coefficient was .907 on the Nurturing and Responsive Relationships subscale, .937 on the Supportive Classroom Environment subscale, .977 on the Social-Emotional Instructional Content subscale, .974 on the Social-Emotional Instructional Strategies subscale, .943 on the Responses to Challenging Behavior subscale, .941 on the Interventions for Children with Persistent Challenging Behavior subscale, and .966 on the Supporting Family subscale.

A similar pattern was observed for these seven latent variable subscales on the How Confident section, with alpha coefficients ranging from .891 to .967 and omega coefficients ranged from .921 to .977, as shown in Table 4-5.

Research Question 2

The purpose of the second research question was to examine Chinese preschool teachers' perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practices as measured by the SETP-C. Based on the internal structure of the SETP-C revealed by the best fitting factor model,

derived composite scores were computed for each latent variable subscale from item-level data. Descriptive analyses were then conducted using the empirically derived latent variable subscale scores. The score mean (M) and standard deviation (SD) of each latent variable subscale, and inter-correlations between latent variable subscales are shown in Tables 4-6, 4-7, and 4-8.

For the How Often section, the total scale mean score of the SETP-C was 4.86 out of 6.00. From highest to lowest, the average score for each latent variable subscale was: Social-Emotional Instructional Content subscale ($M = 5.15$, $SD = .71$), Responses to Challenging Behavior subscale ($M = 5.07$, $SD = .75$), Supportive Classroom Environment subscale ($M = 4.96$, $SD = .71$), Nurturing and Responsive Relationships subscale ($M = 4.93$, $SD = .71$), Social-Emotional Instructional Strategies subscale ($M = 4.87$, $SD = .76$), Supporting Family subscale ($M = 4.36$, $SD = 1.06$), and Interventions for Children with Persistent Challenging Behavior subscale ($M = 4.04$, $SD = 1.15$). Furthermore, subscale means were statistically different from each other.

All inter-correlations between latent variable subscales were statistically significant, and ranged from .354 to .894. The Supportive Classroom Environment subscale was highly correlated with the Nurturing and Responsive Relationships subscale ($r = .841$) and the Social-Emotional Instructional Content subscale ($r = .845$). The Social-Emotional Instructional Content, Social-Emotional Instructional Strategies, and Responses to Challenging Behavior subscales were highly correlated with each other, with correlation coefficients of .865, .844, and .894, respectively. The Interventions for Children with Persistent Challenging Behavior subscale and the Supporting Family subscale were highly correlated ($r = .809$). However, correlations

between the Interventions for Children with Persistent Challenging Behavior subscale and the other five subscales were moderate, ranging from .354 to .622. Moderate correlation was also found between the Supporting Family subscale and three other subscales: (a) the Nurturing and Responsive Relationship subscale ($r = .499$), (b) the Supportive Classroom Environment subscale ($r = .542$), and the Social-Emotional Instructional Content subscale ($r = .566$).

On the How Confident section, Chinese preschool teachers received a total scale mean score of 4.79 on the SETP-C. Similar to the How Often section, the Social-Emotional Instructional Content subscale on the How Confident section received the highest mean score ($M = 5.04$, $SD = .74$), followed by the Responses to Challenging Behavior subscale ($M = 4.99$, $SD = .80$), the Supportive Classroom Environment subscale ($M = 4.91$, $SD = .71$), the Nurturing and Responsive Relationships subscale ($M = 4.84$, $SD = .72$), the Social-Emotional Instructional Strategies subscale ($M = 4.80$, $SD = .80$), the Supporting Family subscale ($M = 4.32$, $SD = 1.07$), and the Interventions for Children with Persistent Challenging Behavior ($M = 4.06$, $SD = 1.15$). All subscale means were statistically different from each other.

As shown in Tables 4-7 and 4-8, similar patterns in inter-correlations between the seven latent variable subscales were found across the How Often and How Confident sections. A statistically significant correlation was found among each pair of the seven latent variable subscales, and the strength of the relationship was either moderate or strong.

With the exception of one latent variable subscale that was scored lowest (i.e., the Interventions for Children with Persistent Challenging Behavior subscale), Chinese

teachers' scores were slightly higher on the How Often section than those on the How Confident section across six other latent variable subscales. Further, Chinese teachers' ratings of frequency were statistically significant related to their ratings of confidence across all latent variable subscales, with correlation coefficients that ranged from .820 to .897.

Research Question 3

The purpose of the third research question was to determine (a) teacher and classroom characteristics associated with teachers' ratings of use and confidence with implementing social, emotional, and behavioral teaching practices, and (b) preschool characteristics associated with teachers' ratings of use and confidence with implementing social, emotional, and behavioral teaching practices. Given the cluster sampling of Chinese teachers nested in preschools, a multilevel model was used. The outcome variable was composite scores for each latent variable subscale. Predictor variables at the teacher/classroom level (Level 1) consisted of teachers' role, professional title, level of education, major, certification in early childhood education, years of teaching experience, social-emotional curriculum, child-to-teacher ratio, child age, inclusion of children with disabilities, and enrollment of children with persistent challenging behavior. Predictor variables at the preschool level (Level 2) were city, region, funding source, and quality rating. A separate multilevel model was conducted for each of the seven latent variable subscales. Before including any predictor variables into the multilevel model, a preliminary unconditional model was performed to estimate the amount of variance in outcome variable that existed within and between preschools.

Unconditional Model

In the present study, the ICC provided an estimate for what proportion of the total variance in the outcome variable was attributed to preschool differences. In multilevel modeling, design effect can be estimated as a function of the ICC and average cluster size (Muthén & Satorra, 1995). Table 4-9 shows the ICC and design effect for each latent variable subscale. The ICCs on the How Often section ranged from 3.9% to 8.1%, and the ICCs on the How Confident section had a range of 3.5% to 6.1%. Specifically, the proportion of the variance in the outcome variable that existed between preschools ranged from a low of 3.5% to a high of 8.1% across the seven latent variable subscales. Most of the variance (91.9%–96.5%) in Chinese teachers' reported frequency of use or implementation confidence occurred at the within-preschool level. The design effect on the How Often section ranged from 1.48 to 2.00, while the range on the How Confident section was 1.43 to 1.75 across latent variable subscales. Although the ICCs and design effect were relatively small, multilevel modeling was still justified due to the nested structure of the data for the present study (Lai & Kwok, 2015; Raudenbush & Bryk, 2002). Multilevel model results for the seven latent variable subscales are shown separately in Tables 4-10 to 4-16.

Teacher Characteristics

Teacher's role (Other) was a significant predictor of Chinese preschool teachers' ratings of use of teaching practices associated with the Nurturing and Responsive relationships subscale ($b_{Often} = -2.813, p < .05$), the Supportive Classroom Environment subscale ($b_{Often} = -3.095, p < .05$), the Social-Emotional Instructional Content subscale ($b_{Often} = -3.790, p < .05$), the Social-Emotional Instructional Strategies subscale ($b_{Often} = -4.208, p < .05$), the Responses to Challenging Behavior subscale ($b_{Often} = -1.166, p$

< .05), and the Supporting Family subscale ($b_{Often} = -1.852, p < .05$). When compared with lead teachers, teachers who identified themselves as roles other than lead and assistant teachers (e.g., child-care workers) were less likely to implement these teaching practices. Similar results were found with teachers' reported confidence in implementing teaching practices associated with these six latent variable subscales.

Professional title ($b_{Often} = -.876, p < .05$) was a significant predictor of Chinese preschool teachers' ratings of use of teaching practices associated with the Nurturing and Responsive subscale, but not for teacher's ratings of implementation confidence ($b_{Confidence} = -.681, p = .119$) on this subscale. In comparison to teachers without a professional title, teachers who held a professional title reported implementing more teaching practices associated with building positive relationships with children, families, and colleagues.

Level of education was a significant predictor of Chinese preschool teachers' reported use ($b_{Often} = .953, p < .05$) and confidence ($b_{Confidence} = 1.039, p < .05$) in implementing teaching practices associated with the Supporting Family subscale. Teachers with an associate's degree were more likely to support families to use social, emotional, and behavioral teaching practices than those with a bachelor's degree or above. In addition, teachers with an associate's degree felt more confident in developing individualized interventions for children with the most persistent and severe challenging behavior ($b_{Confidence} = .791, p < .05$), when compared with those who have obtained a bachelor's degree or above. Teachers who were normal school graduates or held a high school diploma or below felt less confident in using effective strategies to

respond to challenging behavior than those with a bachelor's degree or above ($b_{Confidence} = -1.374, p < .05$).

Certification in early childhood education was a significant predictor of Chinese preschool teachers' ratings of use of teaching practices associated with the Nurturing and Responsive Relationships subscale ($b_{Often} = -2.400, p < .05$), the Supportive Classroom Environment subscale ($b_{Often} = -2.426, p < .05$), the Social-Emotional Instructional Content subscale ($b_{Often} = -4.395, p < .05$), the Social-Emotional Instructional Strategies subscale ($b_{Often} = -5.422, p < .05$), and the Responses to Challenging Behavior subscale ($b_{Often} = -1.379, p < .05$). Teachers without a certification reported implementing fewer teaching practices than those with a certification. However, certification in early childhood education was not significantly related to teachers' reported confidence in implementing social, emotional, and behavioral teaching practices as measured by the SETP-C.

Years of teaching experience was a significant predictor of both Chinese preschool teachers' ratings of use and confidence with implementing teaching practices associated with the Nurturing and Responsive Relationships subscale ($b_{Often} = .081, p < .05; b_{Confidence} = .116, p < .05$), the Supportive Classroom Environment subscale ($b_{Often} = .096, p < .05; b_{Confidence} = .126, p < .05$), the Social-Emotional Instructional Strategies subscale ($b_{Often} = .143, p < .05; b_{Confidence} = .217, p < .05$), and the Responses to Challenging Behavior subscale ($b_{Often} = .037, p < .05; b_{Confidence} = .062, p < .05$). More experienced teachers reported using more and felt more confident in implementing teaching practices associated with these subscales. Further, more experienced

teachers reported to be more confident in implementing teaching practices associated with the Social-Emotional Instructional Content subscale ($b_{Confidence} = .130, p < .05$).

Lead teachers and assistant teachers did not significantly differ in their reported use and confidence in implementing social, emotional, and behavioral teaching practices as measured by the SETP-C. Teacher's major was not significantly associated with their reported use and confidence in implementing these teaching practices.

Classroom Characteristics

Social-emotional curriculum was a significant predictor of Chinese preschool teachers' ratings of use of teaching practices associated with the Nurturing and Responsive Relationships subscale ($b_{Often} = -1.489, p < .05$), the Supportive Classroom Environment subscale ($b_{Often} = -1.952, p < .05$), and the Social-Emotional Instructional Strategies subscale ($b_{Often} = -3.742, p < .05$). Teachers who were implementing a social-emotional curriculum in their classrooms were more likely to use these teaching practices as compared to those who were not implementing a social-emotional curriculum. Similar results were obtained on teachers' reported confidence with these teaching practices. Further, teachers who were implementing a social-emotional curriculum reported more confidence in using teaching practices associated with the Social-Emotional Instructional Content subscale ($b_{Confidence} = -3.229, p < .05$) and the Responses to Challenging Behavior subscale ($b_{Confidence} = -1.064, p < .05$).

Child-to-teacher ratio was a significant predictor of Chinese preschool teachers' ratings of use of teaching practices associated with the Nurturing and Responsive Relationships subscale ($b_{Often} = -.167, p < .05$), the Supportive Classroom Environment subscale ($b_{Often} = -.209, p < .05$), and the Social-Emotional Instructional Content subscale ($b_{Often} = -.229, p < .05$). Teachers from classrooms with a higher child-to-

teacher ratio reported implementing fewer teaching practices than those from classrooms with a smaller child-to-teacher ratio. Similar patterns were found on teachers' reported confidence with implementing teaching practices associated with these subscales. In addition, child-to-teacher ratio was negatively and significantly associated with teachers' reported confidence in supporting families to use social, emotional, and behavioral teaching practices ($b_{Confidence} = -.159, p < .05$).

Whether children with disabilities were enrolled in the classroom was a significant predictor of Chinese preschool teachers' ratings of use of teaching practices associated with the Supportive Classroom Environment subscale ($b_{Often} = 1.147, p < .05$), the Social-Emotional Instructional Strategies subscale ($b_{Often} = 2.026, p < .05$), the Responses to Challenging Behavior subscale ($b_{Often} = .696, p < .05$), the Interventions for Children with Persistent Challenging Behavior subscale ($b_{Often} = .989, p < .05$), and the Supporting Family subscale ($b_{Often} = 1.188, p < .05$). Teachers from classrooms where at least one child with disabilities was enrolled reported implementing less teaching practices than those from general education classrooms. Similar patterns were observed for teachers' reported confidence in implementing teaching practices associated with these subscales. In addition, teachers who have children with disabilities were less confident in building positive relationships with children, families, and colleagues ($b_{Confidence} = 1.165, p < .05$) as compared to those from classrooms that did not involve children with disabilities.

Child age was a significant predictor of Chinese preschool teachers' ratings of use of teaching practices associated with the Supportive Classroom Environment subscale ($b_{4-5\ years} = 1.362, p < .05$; $b_{5-6\ years} = 1.058, p < .05$), the Social-Emotional

Instructional Content subscale ($b_{5-6 \text{ years}} = 1.926, p < .05$), the Social-Emotional Instructional Strategies subscale ($b_{5-6 \text{ years}} = 2.096, p < .05$), the Responses to Challenging Behavior subscale ($b_{4-5 \text{ years}} = .556, p < .05$; $b_{5-6 \text{ years}} = .555, p < .05$), and the Supporting Family subscale ($b_{4-5 \text{ years}} = 1.024, p < .05$; $b_{5-6 \text{ years}} = 1.149, p < .05$). Generally, teachers from 4- to 5-year-old classrooms and 5- to 6-year-old classrooms were more likely to implement teaching practices associated with these subscales, when compared with teachers from 3- to 4-year-old classrooms. However, no statistically significant differences were found between teachers from 3- to 4-year-old classrooms and those from 6- to 7-year-old or mixed-age classrooms.

Similar results were found on the association between child age and teachers' reported implementation confidence. In addition, teachers from 5- to 6-year-old classrooms were more confident about implementation of practices from the Nurturing and Responsive relationships subscale ($b_{Confidence} = 1.242, p < .05$). Teachers from mixed-age classrooms were more confident about implementation of practices from the Supportive Classroom Environment subscale ($b_{Confidence} = 3.550, p < .05$). Teachers from 4- to 5-year-old classrooms were more confident on the Social-Emotional Instructional Content subscale ($b_{Confidence} = 1.532, p < .05$) and the Social-Emotional Instructional Strategies subscale ($b_{Confidence} = 1.983, p < .05$), when compared with teachers from 3- to 4-year-old classrooms.

Whether children with persistent challenging behavior were enrolled in the classroom did not affect Chinese preschool teachers' reported use of and confidence with implementing social, emotional, and behavioral teaching practices as measured by the SETP-C.

Preschool characteristics

City was a significant predictor of both Chinese preschool teachers' ratings of use of and confidence with implementing teaching practices associated with the Nurturing and Responsive Relationships subscale ($b_{Often} = 1.580, p < .05; b_{Confidence} = 1.453, p < .05$), the Supportive Classroom Environment subscale ($b_{Often} = 1.650, p < .05; b_{Confidence} = 1.701, p < .05$), and the Social-Emotional Instructional Strategies subscale ($b_{Often} = 2.901, p < .05; b_{Confidence} = 2.715, p < .05$). Teachers from preschools in Ningbo were more likely and felt more confident in implementing teaching practices associated with these three latent variable subscales, as compared to those from preschools in Beijing.

Region of preschool (urban vs. rural), funding source for the preschool (public vs. private), and quality rating of preschool were not significantly associated with teachers' reported use of and confidence with implementing social, emotional, and behavioral teaching practices as measured by the SETP-C.

Research Question 4

The purpose of the fourth research question was to examine the relationships between various variables and the most needed types of supports requested by Chinese preschool teachers for social education. On the SETP-C, teachers were asked to indicate, using a list provided, the types of supports that might best assist them in preschool social education. Overall, nearly half of the Chinese teachers indicated a need for a specific social-emotional curriculum ($n = 741; 46.3\%$), followed by family's support and cooperation ($n = 362; 22.6\%$), inservice training from research experts ($n = 175; 10.9\%$), and systematic preservice training ($n = 164; 10.3\%$). The two least

requested supports were inservice coaching from experienced practitioners ($n = 106$; 6.6%) and attention and support from preschool principals ($n = 40$; 2.5%).

A series of the chi-square test of association and the Kruskal-Wallis test were conducted to compare the proportions of Chinese preschool teachers with different individual, classroom, and preschool characteristics on the most needed types of supports. Tables 4-17, 4-18, and 4-19 show the frequencies and proportions of Chinese preschool teachers cross-classified by different characteristics and needed types of supports. Given the limitation of chi-square test with respect to the sample size, the chi-square statistic together with measures of the strength of association (Cramer's V and Cohen's ω) are presented when a statistically significant result was obtained. Then, inspection of cells where the absolute values of the standardized residuals were larger than 1.96 was conducted to detect significant differences in observed to expected frequencies.

Results suggest these following individual, classroom, and preschool characteristics were significantly associated with the types of supports needed by Chinese preschool teachers: (a) teacher's professional title, $\chi^2 (5, N = 1,587) = 28.941$, $p < .05$; (b) level of education of teacher, $\chi^2 (10, N = 1,588) = 28.726$, $p < .05$; (c) teacher's major, $\chi^2 (5, N = 1,588) = 15.077$, $p < .05$; (d) teacher's certification in early childhood education, $\chi^2 (5, N = 1,588) = 22.726$, $p < .05$; (e) city of preschool, $\chi^2 (5, N = 1,588) = 18.828$, $p < .05$; (f) funding source for preschool, $\chi^2 (5, N = 1,588) = 31.960$, $p < .05$; and (g) quality rating of preschool, $\chi^2 (10, N = 1,588) = 34.565$, $p < .05$. For these variables, the strength of the association as measured by Cramer's V and Cohen's ω values ranged from .097 to .146, which were considered small effects (Cohen, 1988).

More specifically, teachers without a professional title and teachers who did not major in early childhood education were less likely to request a need for a specific social-emotional curriculum and were more likely to report a need for systematic preservice training. Both teachers with a high school diploma and uncertified teachers were less likely to request a need for a social-emotional curriculum, and were more likely to need family's support and cooperation and inservice coaching from experienced practitioners. Teachers from private preschools were less likely to report a need for a social-emotional curriculum, and more likely to need family's support and cooperation.

On the contrary, teachers from preschools receiving a quality level of "excellent" were more likely to report a need for a social-emotional curriculum and less likely to report a need for family's support and cooperation.

Chinese preschool teachers did not differ in terms of types of supports needed on the following variables: (a) teachers' role, $\chi^2(10, N = 1,588) = 16.899, p = .077$; (b) social-emotional curriculum, $\chi^2(5, N = 1,588) = 4.52, p = .460$; (c) child age in the classroom, $\chi^2(20, N = 1,587) = 18.425, p = .517$; (d) inclusion of children with disabilities, $\chi^2(5, N = 1,585) = 7.983, p = .157$; (e) enrollment of children with persistent challenging behavior, $\chi^2(5, N = 1,578) = 4.451, p = .487$; and (f) region of preschool, $\chi^2(5, N = 1,588) = 6.787, p = .237$.

Figures 4-1 and 4-2 show the boxplots for the Kruskal-Wallis test for the two continuous variables. There were statistically significant differences among preschool teachers by the six types of supports on (a) years of teaching experience, $H(5, N = 1585) = 45.814, p < .001$; and (b) child-to-teacher ratio, $H(5, N = 1584) = 15.239, p = .009$.

Table 4-1. Fit Indices for the four models on the How Often section.

Model	Specifications	χ^2	# of Free Parameter	df	P-Value	RMSEA [CI]	CFI	TLI
Model 1: Five-factor	Relationships: Items 1 to 9 Environment: Items 10 to 20 Social-Emotional teaching: Items 21 to 53 Addressing CB: Items 54 to 63 Families: Items 64 to 70	18270.942	430	2335	<.001	.065 [.064 to .066]	.925	.922
Model 2: Six-factor (A)	Relationships: Items 1 to 9 Environment: Items 10 to 20 Social-Emotional teaching: Items 21 to 53 CB: Items 54 to 58 PCB: Items 59 to 63 Families: Items 64 to 70	12639.009	435	2330	<.001	.053 [.052 to .054]	.951	.949
Model 3: Six-factor (B)	Relationships: Items 1 to 9 Environment: Items 10 to 20 SE Instructional Content: Items 21 to 35 SE Instructional Strategies: Items 36 to 53 Addressing CB: Items 54 to 63 Families: Items 64 to 70	15758.962	435	2330	<.001	.06 [.059 to .061]	.936	.934
Model 4: Seven-factor	Relationships: Items 1 to 9 Environment: Items 10 to 20 SE Instructional Content: Items 21 to 35 SE Instructional Strategies: Items 36 to 53 CB: Items 54 to 58 PCB: Items 59 to 63 Families: Items 64 to 70	9442.411	441	2324	<.001	.044 [.043 to .045]	.966	.965

Note: df = degree of freedom, RMSEA = root mean square error of approximation, CI = confidence interval, CFI = comparative fit index, TLI = Tucker-Lewis index.

Table 4-2. Fit Indices for the four models on the How Confident section.

Model	Specifications	χ^2	# of Free Parameter	df	P-Value	RMSEA [CI]	CFI	TLI
Model 1: Five-factor	Relationships: Items 1 to 9 Environment: Items 10 to 20 Social-Emotional teaching: Items 21 to 53 Addressing CB: Items 54 to 63 Families: Items 64 to 70	17196.641	430	2335	<.001	.063 [.062 to .064]	.929	.926
Model 2: Six-factor (A)	Relationships: Items 1 to 9 Environment: Items 10 to 20 Social-Emotional teaching: Items 21 to 53 CB: Items 54 to 58 PCB: Items 59 to 63 Families: Items 64 to 70	11536.643	435	2330	<.001	.050 [.049 to .051]	.956	.954
Model 3: Six-factor (B)	Relationships: Items 1 to 9 Environment: Items 10 to 20 SE Instructional Content: Items 21 to 35 SE Instructional Strategies: Items 36 to 53 Addressing CB: Items 54 to 63 Families: Items 64 to 70	15131.86	435	2330	<.001	.059 [.058 to .060]	.939	.936
Model 4: Seven-factor	Relationships: Items 1 to 9 Environment: Items 10 to 20 SE Instructional Content: Items 21 to 35 SE Instructional Strategies: Items 36 to 53 CB: Items 54 to 58 PCB: Items 59 to 63 Families: Items 64 to 70	8912.503	441	2324	<.001	.042 [.041 to .043]	.968	.967

Note: df = degree of freedom, RMSEA = root mean square error of approximation, CI = confidence interval, CFI = comparative fit index, TLI = Tucker-Lewis index.

Table 4-3. Standardized factor loadings on the How Often section.

Item	Relationships	Environment	SEI Content	SEI Strategies	Responses to CB	PCB Intervention	Supporting Family
F1: Talk with children about their play	.586	--	--	--	--	--	--
F2: Respond to children's idea	.682	--	--	--	--	--	--
F3: Use alternative communication strategies	.675	--	--	--	--	--	--
F4: Coordinate the planning for daily activities	.694	--	--	--	--	--	--
F5: Discuss and coordinate responsibilities	.770	--	--	--	--	--	--
F6: Take turns leading or co-leading activities	.693	--	--	--	--	--	--
F7: Provide families with daily information	.683	--	--	--	--	--	--
F8: Use different methods of communication	.847	--	--	--	--	--	--
F9: Establish bi-directional communication	.834	--	--	--	--	--	--
F10: Structure small-group activities	--	.668	--	--	--	--	--
F11: Prepare classroom activities	--	.745	--	--	--	--	--
F12: Plan balanced daily schedule	--	.691	--	--	--	--	--
F13: Use transition strategies	--	.747	--	--	--	--	--
F14: Guide individual children to transit	--	.775	--	--	--	--	--
F15: Provide developmentally appropriate activities	--	.800	--	--	--	--	--
F16: Assist in selecting activities	--	.836	--	--	--	--	--
F17: Provide choices	--	.831	--	--	--	--	--
F18: Use directions	--	.692	--	--	--	--	--
F19: Check in with children about direction	--	.803	--	--	--	--	--
F20: Individualize directions	--	.752	--	--	--	--	--
F21: Instruction on rules of behavior	--	--	.801	--	--	--	--
F22: Instruction on friendship skills	--	--	.855	--	--	--	--
F23: Instruction on social problem solving	--	--	.844	--	--	--	--
F24: Instruction on peer interaction	--	--	.863	--	--	--	--
F25: Instruction on autonomy/independence	--	--	.840	--	--	--	--
F26: Instruction on self-confidence/self-esteem	--	--	.881	--	--	--	--
F27: Instruction on self-restraint/self-control	--	--	.849	--	--	--	--
F28: Instruction on showing concern and regard	--	--	.876	--	--	--	--
F29: Instruction on emotional vocabulary	--	--	.829	--	--	--	--
F30: Instruction on participating the collective	--	--	.865	--	--	--	--
F31: Instruction on sense of belonging	--	--	.864	--	--	--	--
F32: Instruction on emotion recognition	--	--	.869	--	--	--	--
F33: Instruction on emotion expression	--	--	.894	--	--	--	--
F34: Instruction on emotion regulation	--	--	.886	--	--	--	--
F35: Instruction on showing empathy	--	--	.852	--	--	--	--

Table 4-3. Continued

Item	Relationships	Environment	SEI Content	SEI Strategies	Responses to CB	PCB Intervention	Supporting Family
F36: Post classroom rules of behavior	--	--	--	.645	--	--	--
F37: Describe observation of children	--	--	--	.830	--	--	--
F38: Modeling	--	--	--	.824	--	--	--
F39: Individualize social-emotional instruction	--	--	--	.837	--	--	--
F40: Use descriptive praise	--	--	--	.841	--	--	--
F41: Provide planned opportunities /activities	--	--	--	.834	--	--	--
F42: Maintain peer interactions	--	--	--	.881	--	--	--
F43: Teach peer-mediated strategies	--	--	--	.823	--	--	--
F44: Support peer-mediated strategies	--	--	--	.819	--	--	--
F45: Validate children's emotions	--	--	--	.857	--	--	--
F46: Provide calm-down strategies	--	--	--	.842	--	--	--
F47: Generate possible solutions	--	--	--	.848	--	--	--
F48: Role-playing	--	--	--	.825	--	--	--
F49: Use visual	--	--	--	.792	--	--	--
F50: Lessons	--	--	--	.775	--	--	--
F51: Routines	--	--	--	.843	--	--	--
F52: Eduplay	--	--	--	.860	--	--	--
F53: Embedded instruction	--	--	--	.838	--	--	--
F54: Identify the function	--	--	--	--	.893	--	--
F55: Teach alternative behaviors	--	--	--	--	.898	--	--
F56: Remind of behavior rules	--	--	--	--	.860	--	--
F57: Developmentally appropriate strategies	--	--	--	--	.885	--	--
F58: Describe the appropriate behavior	--	--	--	--	.841	--	--
F59: Referral	--	--	--	--	--	.847	--
F60: Development the behavior support plan	--	--	--	--	--	.832	--
F61: Contribute ideas for strategies	--	--	--	--	--	.839	--
F62: Implement the behavior support plan	--	--	--	--	--	.950	--
F63: Monitor children's progress	--	--	--	--	--	.887	--
F64: Offer families social-emotional information	--	--	--	--	--	--	.939
F65: SE community resources	--	--	--	--	--	--	.893
F66: CB related community resources	--	--	--	--	--	--	.890
F67: Give practical strategies	--	--	--	--	--	--	.923
F68: Development CB strategies for home	--	--	--	--	--	--	.919
F69: Work with families on CB	--	--	--	--	--	--	.900
F70: Involve families in behavior support plan	--	--	--	--	--	--	.807

Note: SEI = social-emotional Instruction, CB = challenging behavior, PCB = persistent challenging behavior.

Table 4-4. Standardized factor loadings on the How Confident section.

Item	Relationships	Environment	SEI Content	SEI Strategies	Responses to CB	PCB Intervention	Supporting Family
C1: Talk with children about their play	.643	--	--	--	--	--	--
C2: Respond to children's idea	.730	--	--	--	--	--	--
C3: Use alternative communication strategies	.709	--	--	--	--	--	--
C4: Coordinate the planning for daily activities	.735	--	--	--	--	--	--
C5: Discuss and coordinate responsibilities	.789	--	--	--	--	--	--
C6: Take turns leading or co-leading activities	.711	--	--	--	--	--	--
C7: Provide families with daily information	.720	--	--	--	--	--	--
C8: Use different methods of communication	.852	--	--	--	--	--	--
C9: Establish bi-directional communication	.850	--	--	--	--	--	--
C10: Structure small-group activities	--	.697	--	--	--	--	--
C11: Prepare classroom activities	--	.744	--	--	--	--	--
C12: Plan balanced daily schedule	--	.713	--	--	--	--	--
C13: Use transition strategies	--	.774	--	--	--	--	--
C14: Guide individual children to transit	--	.793	--	--	--	--	--
C15: Provide developmentally appropriate activities	--	.801	--	--	--	--	--
C16: Assist in selecting activities	--	.856	--	--	--	--	--
C17: Provide choices	--	.827	--	--	--	--	--
C18: Use directions	--	.754	--	--	--	--	--
C19: Check in with children about direction	--	.815	--	--	--	--	--
C20: Individualize directions	--	.793	--	--	--	--	--
C21: Instruction on rules of behavior	--	--	.817	--	--	--	--
C22: Instruction on friendship skills	--	--	.838	--	--	--	--
C23: Instruction on social problem solving	--	--	.851	--	--	--	--
C24: Instruction on peer interaction	--	--	.870	--	--	--	--
C25: Instruction on autonomy/independence	--	--	.834	--	--	--	--
C26: Instruction on self-confidence/self-esteem	--	--	.871	--	--	--	--
C27: Instruction on self-restraint/self-control	--	--	.848	--	--	--	--
C28: Instruction on showing concern and regard	--	--	.873	--	--	--	--
C29: Instruction on emotional vocabulary	--	--	.836	--	--	--	--
C30: Instruction on participating the collective	--	--	.868	--	--	--	--
C31: Instruction on sense of belonging	--	--	.863	--	--	--	--
C32: Instruction on emotion recognition	--	--	.882	--	--	--	--
C33: Instruction on emotion expression	--	--	.909	--	--	--	--
C34: Instruction on emotion regulation	--	--	.900	--	--	--	--
C35: Instruction on showing empathy	--	--	.854	--	--	--	--

Table 4-4. Continued

Item	Relationships	Environment	SEI Content	SEI Strategies	Responses to CB	PCB Intervention	Supporting Family
C36: Post classroom rules of behavior	--	--	--	.712	--	--	--
C37: Describe observation of children	--	--	--	.850	--	--	--
C38: Modeling	--	--	--	.837	--	--	--
C39: Individualize social-emotional instruction	--	--	--	.847	--	--	--
C40: Use descriptive praise	--	--	--	.830	--	--	--
C41: Provide planned opportunities /activities	--	--	--	.856	--	--	--
C42: Maintain peer interactions	--	--	--	.886	--	--	--
C43: Teach peer-mediated strategies	--	--	--	.826	--	--	--
C44: Support peer-mediated strategies	--	--	--	.835	--	--	--
C45: Validate children's emotions	--	--	--	.868	--	--	--
C46: Provide calm-down strategies	--	--	--	.851	--	--	--
C47: Generate possible solutions	--	--	--	.856	--	--	--
C48: Role-playing	--	--	--	.845	--	--	--
C49: Use visual	--	--	--	.808	--	--	--
C50: Lessons	--	--	--	.797	--	--	--
C51: Routines	--	--	--	.870	--	--	--
C52: Eduplay	--	--	--	.873	--	--	--
C53: Embedded instruction	--	--	--	.854	--	--	--
C54: Identify the function	--	--	--	--	.912	--	--
C55: Teach alternative behaviors	--	--	--	--	.900	--	--
C56: Remind of behavior rules	--	--	--	--	.880	--	--
C57: Developmentally appropriate strategies	--	--	--	--	.895	--	--
C58: Describe the appropriate behavior	--	--	--	--	.853	--	--
C59: Referral	--	--	--	--	--	.876	--
C60: Development the behavior support plan	--	--	--	--	--	.848	--
C61: Contribute ideas for strategies	--	--	--	--	--	.831	--
C62: Implement the behavior support plan	--	--	--	--	--	.962	--
C63: Monitor children's progress	--	--	--	--	--	.911	--
C64: Offer families social-emotional information	--	--	--	--	--	--	.939
C65: SE community resources	--	--	--	--	--	--	.899
C66: CB related community resources	--	--	--	--	--	--	.891
C67: Give practical strategies	--	--	--	--	--	--	.929
C68: Development CB strategies for home	--	--	--	--	--	--	.924
C69: Work with families on CB	--	--	--	--	--	--	.897
C70: Involve families in behavior support plan	--	--	--	--	--	--	.824

Note: SEI = social-emotional Instruction, CB = challenging behavior, PCB = persistent challenging behavior.

Table 4-5. Cronbach's alpha and omega coefficient of reliability for subscales.

Subscale	Items	Number of Items	How Often section		How Confident section	
			Cronbach's Alpha	Omega	Cronbach's Alpha	Omega
Nurturing and Responsive Relationships	Item 1, Item 2, Item 3, Item 4, Item 5, Item 6, Item 7, Item 8, Item 9	9	.875	.907	.891	.921
Supportive Classroom Environment	Item 10, Item 11, Item 12, Item 13, Item 14, Item 15, Item 16, Item 17, Item 18, Item 19, Item 20	11	.917	.937	.925	.945
Social-Emotional Instructional Content	Item 21, Item 22, Item 23, Item 24, Item 25, Item 26, Item 27, Item 28, Item 29, Item 30, Item 31, Item 32, Item 33, Item 34, Item 35	15	.964	.977	.965	.977
Social-Emotional Instructional Strategies	Item 36, Item 37, Item 38, Item 39, Item 40, Item 41, Item 42, Item 43, Item 44, Item 45, Item 46, Item 47, Item 48, Item 49, Item 50, Item 51, Item 52, Item 53	18	.962	.974	.967	.977
Responses to Challenging Behavior	Item 54, Item 55, Item 56, Item 57, Item 58	5	.914	.943	.924	.949
Interventions for Children with Persistent Challenging Behavior	Item 59, Item 60, Item 61, Item 62, Item 63	5	.909	.941	.917	.948
Supporting Family	Item 64, Item 65, Item 66, Item 67, Item 68, Item 69, Item 70	7	.948	.966	.951	.968

Table 4-6. Descriptive statistics for latent variable subscales.

Subscale	Average Subscale Scores					Summated Subscale Scores				
	Minimum	Maximum	<i>M</i>	<i>SD</i>	Variance	Minimum	Maximum	<i>M</i>	<i>SD</i>	Variance
How Often section										
Nurturing and Responsive Relationships	1.000	6.000	4.929	.709	.503	9.000	54.000	44.328	6.387	40.796
Supportive Classroom Environment	1.000	6.000	4.964	.707	.500	11.000	66.000	54.587	7.816	61.091
Social-Emotional Instructional Content	1.000	6.000	5.148	.714	.510	15.000	90.000	77.219	10.714	114.792
Social-Emotional Instructional Strategies	1.000	6.000	4.868	.763	.582	18.000	108.000	87.622	13.729	188.491
Responses to Challenging Behavior	1.000	6.000	5.074	.750	.562	5.000	30.000	25.364	3.749	14.053
Interventions for Children with Persistent Challenging Behavior	1.000	6.000	4.038	1.146	1.313	5.000	30.000	20.181	5.728	32.815
Supporting Family	1.000	6.000	4.356	1.055	1.113	7.000	42.000	30.490	7.386	54.550
Total	1.030	5.990	4.855	.666	.443	72.000	418.000	339.791	46.605	2172.071
How Confident section										
Nurturing and Responsive Relationships	1.000	6.000	4.837	.722	.522	9.000	54.000	43.488	6.523	42.548
Supportive Classroom Environment	1.000	6.000	4.907	.714	.510	11.000	66.000	53.957	7.888	62.220
Social-Emotional Instructional Content	1.000	6.000	5.044	.742	.550	15.000	90.000	75.635	11.147	124.256
Social-Emotional Instructional Strategies	1.000	6.000	4.797	.798	.636	18.000	108.000	86.324	14.369	206.479
Responses to Challenging Behavior	1.000	6.000	4.987	.799	.638	5.000	30.000	24.925	4.010	16.083
Interventions for Children with Persistent Challenging Behavior	1.000	6.000	4.061	1.150	1.322	5.000	30.000	20.299	5.748	33.036
Supporting Family	1.000	6.000	4.323	1.068	1.141	7.000	42.000	30.259	7.478	55.915
Total	1.070	6.000	4.786	.705	.496	75.000	420.000	334.887	49.341	2434.556

Table 4-7. Inter-correlations between latent variable subscales on the How Often section.

	FA1	FA2	FA3	FA4	FA5	FA6	FA7
Nurturing and Responsive Relationships (FA1)	1						
Supportive Classroom Environment (FA2)	.841*	1					
Social-Emotional Instructional Content (FA3)	.750*	.845*	1				
Social-Emotional Instructional Strategies (FA4)	.697*	.779*	.865*	1			
Responses to Challenging Behavior (FA5)	.705*	.788*	.844*	.894*	1		
Interventions for Children with Persistent Challenging Behavior (FA6)	.354*	.417*	.423*	.622*	.503*	1	
Supporting Family (FA7)	.499*	.542*	.566*	.742*	.629*	.809*	1

Note: * $p < .05$.

Table 4-8. Inter-correlations between latent variable subscales on the How Confident section.

	FA1	FA2	FA3	FA4	FA5	FA6	FA7
Nurturing and Responsive Relationships (FA1)	1						
Supportive Classroom Environment (FA2)	.856*	1					
Social-Emotional Instructional Content (FA3)	.777*	.871*	1				
Social-Emotional Instructional Strategies (FA4)	.745*	.822*	.891*	1			
Responses to Challenging Behavior (FA5)	.759*	.822*	.870*	.911*	1		
Interventions for Children with Persistent Challenging Behavior (FA6)	.458*	.511*	.522*	.678*	.575*	1	
Supporting Family (FA7)	.575*	.610*	.634*	.777*	.690*	.832*	1

Note: * $p < .05$.

Table 4-9. Intraclass correlation coefficient and design effect for latent variable subscales.

Subscale	How Often section		How Confident section	
	ICC	Design Effect	ICC	Design Effect
Nurturing and Responsive Relationships	5.1%	1.63	3.5%	1.43
Supportive Classroom Environment	5.6%	1.69	5.0%	1.62
Social-Emotional Instructional Content	5.7%	1.70	3.9%	1.48
Social-Emotional Instructional Strategies	8.1%	2.00	6.1%	1.75
Responses to Challenging Behavior	5.9%	1.73	4.5%	1.55
Interventions for Children with Persistent Challenging Behavior	3.9%	1.48	4.5%	1.55
Supporting Family	6.6%	1.81	5.6%	1.69

Note: ICC = intraclass correlation coefficient.

Table 4-10. Multilevel results for the Nurturing and Responsive Relationships subscale.

Random Effect	Reference Group (Categorical variables)	How Often section (Possible score range = 9 to 54)				How Confident section (Possible score range = 9 to 54)			
		Coefficient	SE	t	p	Coefficient	SE	t	p
Intercept	--	44.507	.874	50.926	.000	43.397	.891	48.711	.000
<i>Level 1 (Teacher/classroom Level)</i>									
Role: Assistant teacher	Role: Lead teacher	-.191	.377	-.508	.611	-.406	.388	-1.047	.295
Role: Other	Role: Lead teacher	-2.813*	.495	-5.684	.000	-2.102*	.510	-4.124	.000
Professional title: No	Professional title: Yes	-0.876*	.425	-2.063	.039	-.681	.436	-1.561	.119
Education: Below associate	Education: Bachelor or above	-.398	.960	-.414	.679	-.323	.990	-.326	.745
Education: Associate	Education: Bachelor or above	.411	.362	1.136	.256	.332	.372	.893	.372
Major: Not ECE	Major: ECE	-.260	.565	-.460	.645	-.633	.582	-1.087	.277
Certification: No	Certification: Yes	-2.400*	.853	-2.814	.005	-.815	.880	-.926	.354
Years of teaching experience	--	0.081*	.024	3.329	.001	.116*	.025	4.624	.000
SE Curriculum: No	SE Curriculum: Yes	-1.489*	.736	-2.024	.043	-2.140*	.752	-2.848	.004
Child-to-teacher ratio	--	-0.167*	.066	-2.525	.012	-.189*	.068	-2.787	.005
Children with disabilities: No	Children with disabilities: Yes	.758	.436	1.738	.082	1.165*	.449	2.594	.009
Children with PCB: No	Children with PCB: Yes	.082	.326	.250	.802	.376	.336	1.119	.263
Child age (4-5 years)	Child age (3-4 years)	.141	.412	.341	.733	.575	.425	1.352	.176
Child age (5-6 years)	Child age (3-4 years)	.661	.423	1.564	.118	1.242*	.435	2.854	.004
Child age (6-7 years)	Child age (3-4 years)	-.292	.559	-.522	.602	.461	.576	.800	.424
Child age (mixed)	Child age (3-4 years)	1.119	1.348	.830	.407	1.973	1.380	1.430	.153
<i>Level 2 (Preschool Level)</i>									
City: Ningbo	City: Beijing	1.580*	.436	3.624	.000	1.453*	.440	3.302	.001
Region: Rural	Region: Urban	-.160	.476	-.336	.737	-.177	.480	-.369	.712
Funding source: Private	Funding source: Public	.022	.553	.039	.969	-.411	.557	-.737	.461
Quality rating: Good	Quality rating: Excellent	.784	.461	1.700	.089	.767	.461	1.665	.096
Quality rating: Unrated	Quality rating: Excellent	-.006	.837	-.007	.994	.723	.845	.856	.392

Note: ECE = early childhood education; PCB = persistent challenging behavior; SE curriculum = social-emotional curriculum. * $p < .05$.

Table 4-11. Multilevel results for the Supportive Classroom Environment subscale.

Random Effect	Reference Group (Categorical variables)	How Often section (Possible score range = 11 to 66)				How Confident section (Possible score range = 11 to 66)			
		Coefficient	SE	t	p	Coefficient	SE	t	p
Intercept	--	54.629	1.059	51.587	.000	54.152	1.082	50.064	.000
<i>Level 1 (Teacher/classroom Level)</i>									
Role: Assistant teacher	Role: Lead teacher	-.002	.456	-.005	.996	-.600	.465	-1.291	.197
Role: Other	Role: Lead teacher	-3.095*	.597	-5.180	.000	-2.427*	.609	-3.984	.000
Professional title: No	Professional title: Yes	-.936	.514	-1.821	.069	-.523	.524	-.999	.318
Education: Below associate	Education: Bachelor or above	-.590	1.160	-.508	.611	-1.291	1.185	-1.090	.276
Education: Associate	Education: Bachelor or above	.599	.437	1.371	.170	.545	.446	1.224	.221
Major: Not ECE	Major: ECE	-.728	.683	-1.066	.287	-1.243	.697	-1.784	.074
Certification: No	Certification: Yes	-2.426*	1.032	-2.351	.019	-.890	1.053	-.846	.398
Years of teaching experience	--	.096*	.029	3.256	.001	.126*	.030	4.202	.000
SE Curriculum: No	SE Curriculum: Yes	-1.952*	.889	-2.195	.028	-2.577*	.911	-2.830	.005
Child-to-teacher ratio	--	-.209*	.079	-2.625	.009	-.240*	.081	-2.948	.003
Children with disabilities: No	Children with disabilities: Yes	1.147*	.527	2.175	.030	1.158*	.538	2.152	.031
Children with PCB: No	Children with PCB: Yes	.149	.394	.377	.706	.601	.403	1.493	.135
Child age (4-5 years)	Child age (3-4 years)	1.362*	.499	2.729	.006	1.652*	.509	3.243	.001
Child age (5-6 years)	Child age (3-4 years)	1.058*	.511	2.070	.038	1.719*	.521	3.299	.001
Child age (6-7 years)	Child age (3-4 years)	.749	.677	1.107	.268	1.229	.690	1.782	.075
Child age (mixed)	Child age (3-4 years)	2.086	1.632	1.278	.201	3.550*	1.659	2.140	.032
<i>Level 2 (Preschool Level)</i>									
City: Ningbo	City: Beijing	1.650*	.522	3.161	.002	1.701*	.542	3.138	.002
Region: Rural	Region: Urban	.053	.569	.093	.926	.152	.592	.257	.797
Funding source: Private	Funding source: Public	-.129	.660	-.195	.845	-.610	.688	-.887	.375
Quality rating: Good	Quality rating: Excellent	.017	.551	.031	.975	-.349	.571	-.612	.540
Quality rating: Unrated	Quality rating: Excellent	-1.440	1.001	-1.439	.150	-.885	1.039	-.852	.394

Note: ECE = early childhood education; PCB = persistent challenging behavior; SE curriculum = social-emotional curriculum. * $p < .05$.

Table 4-12. Multilevel results for the Social-Emotional Instructional Content subscale.

Random Effect	Reference Group (Categorical variables)	How Often section (Possible score range = 15 to 90)				How Confident section (Possible score range = 15 to 90)			
		Coefficient	SE	t	p	Coefficient	SE	t	p
Intercept	--	77.392	1.525	50.739	.000	75.888	1.572	48.272	.000
<i>Level 1 (Teacher/classroom Level)</i>									
Role: Assistant teacher	Role: Lead teacher	-.357	.638	-.560	.575	-.825	.671	-1.228	.219
Role: Other	Role: Lead teacher	-3.790*	.838	-4.525	.000	-2.774*	.880	-3.153	.002
Professional title: No	Professional title: Yes	-.692	.724	-.955	.340	-.241	.759	-.318	.751
Education: Below associate	Education: Bachelor or above	-1.714	1.626	-1.054	.292	-1.993	1.710	-1.166	.244
Education: Associate	Education: Bachelor or above	.530	.614	.863	.388	.565	.644	.878	.380
Major: Not ECE	Major: ECE	-.421	.957	-.440	.660	-.957	1.006	-.951	.342
Certification: No	Certification: Yes	-4.395*	1.447	-3.037	.002	-1.650	1.520	-1.085	.278
Years of teaching experience	--	.080	.041	1.934	.053	.130*	.043	2.991	.003
SE Curriculum: No	SE Curriculum: Yes	-2.360	1.281	-1.843	.065	-3.229*	1.323	-2.442	.015
Child-to-teacher ratio	--	-.229*	.113	-2.022	.043	-.263*	.118	-2.231	.026
Children with disabilities: No	Children with disabilities: Yes	1.441	.740	1.947	.052	1.335	.777	1.718	.086
Children with PCB: No	Children with PCB: Yes	-.123	.552	-.223	.824	.700	.581	1.205	.228
Child age (4-5 years)	Child age (3-4 years)	1.110	.699	1.589	.112	1.532*	.735	2.084	.037
Child age (5-6 years)	Child age (3-4 years)	1.926*	.715	2.691	.007	2.956*	.753	3.928	.000
Child age (6-7 years)	Child age (3-4 years)	.945	.947	.997	.319	1.631	.996	1.637	.102
Child age (mixed)	Child age (3-4 years)	2.848	2.298	1.239	.215	4.650	2.397	1.940	.052
<i>Level 2 (Preschool Level)</i>									
City: Ningbo	City: Beijing	1.521	.796	1.912	.056	1.450	.799	1.814	.070
Region: Rural	Region: Urban	.282	.871	.324	.746	.298	.874	.341	.733
Funding source: Private	Funding source: Public	.203	1.015	.201	.841	-.394	1.016	-.388	.698
Quality rating: Good	Quality rating: Excellent	.020	.847	.023	.981	-.265	.843	-.314	.753
Quality rating: Unrated	Quality rating: Excellent	-1.302	1.518	-.857	.391	-.699	1.529	-.457	.647

Note: ECE = early childhood education; PCB = persistent challenging behavior; SE curriculum = social-emotional curriculum. * $p < .05$.

Table 4-13. Multilevel results for the Social-Emotional Instructional Strategies subscale.

Random Effect	Reference Group (Categorical variables)	How Often section (Possible score range = 18 to 108)				How Confident section (Possible score range = 18 to 108)			
		Coefficient	SE	t	p	Coefficient	SE	t	p
Intercept	--	87.723	1.966	44.629	.000	86.084	2.048	42.032	.000
<i>Level 1 (Teacher/classroom Level)</i>									
Role: Assistant teacher	Role: Lead teacher	-1.416	.815	-1.739	.082	-1.672	.860	-1.945	.052
Role: Other	Role: Lead teacher	-4.208*	1.071	-3.931	.000	-2.938*	1.129	-2.603	.009
Professional title: No	Professional title: Yes	-.866	.929	-.933	.351	-.580	.977	-.594	.553
Education: Below associate	Education: Bachelor or above	-1.015	2.077	-.489	.625	-2.835	2.191	-1.294	.196
Education: Associate	Education: Bachelor or above	.946	.786	1.205	.228	.913	.828	1.103	.270
Major: Not ECE	Major: ECE	-.561	1.222	-.459	.646	-1.650	1.290	-1.280	.201
Certification: No	Certification: Yes	-5.422*	1.848	-2.934	.003	-1.910	1.949	-.980	.327
Years of teaching experience	--	.143*	.053	2.705	.007	.217*	.056	3.900	.000
SE Curriculum: No	SE Curriculum: Yes	-3.742*	1.641	-2.280	.023	-4.254*	1.719	-2.475	.013
Child-to-teacher ratio	--	-.167	.146	-1.147	.251	-.275	.153	-1.800	.072
Children with disabilities: No	Children with disabilities: Yes	2.026*	.946	2.143	.032	2.027*	.997	2.033	.042
Children with PCB: No	Children with PCB: Yes	-.073	.705	-.103	.918	.982	.744	1.320	.187
Child age (4-5 years)	Child age (3-4 years)	1.739	.893	1.946	.052	1.983*	.943	2.103	.035
Child age (5-6 years)	Child age (3-4 years)	2.096*	.914	2.294	.022	2.902*	.964	3.009	.003
Child age (6-7 years)	Child age (3-4 years)	-.273	1.209	-.226	.821	.414	1.277	.324	.746
Child age (mixed)	Child age (3-4 years)	4.353	2.940	1.480	.139	5.257	3.092	1.700	.089
<i>Level 2 (Preschool Level)</i>									
City: Ningbo	City: Beijing	2.901*	1.053	2.755	.006	2.715*	1.082	2.511	.012
Region: Rural	Region: Urban	.268	1.154	.232	.816	.210	1.183	.178	.859
Funding source: Private	Funding source: Public	1.246	1.345	.926	.354	.192	1.378	.139	.889
Quality rating: Good	Quality rating: Excellent	.543	1.125	.483	.629	.557	1.148	.485	.627
Quality rating: Unrated	Quality rating: Excellent	-2.244	2.004	-1.120	.263	-.771	2.059	-.374	.708

Note: ECE = early childhood education; PCB = persistent challenging behavior; SE curriculum = social-emotional curriculum. * $p < .05$.

Table 4-14. Multilevel results for the Responses to Challenging Behavior subscale.

Random Effect	Reference Group (Categorical variables)	How Often section (Possible score range = 5 to 30)				How Confident section (Possible score range = 5 to 30)			
		Coefficient	SE	t	p	Coefficient	SE	t	p
Intercept	--	25.249	.539	46.849	.000	24.718	.570	43.396	.000
<i>Level 1 (Teacher/classroom Level)</i>									
Role: Assistant teacher	Role: Lead teacher	-.360	.225	-1.599	.110	-.350	.241	-1.456	.145
Role: Other	Role: Lead teacher	-1.166*	.296	-3.942	.000	-.854*	.316	-2.703	.007
Professional title: No	Professional title: Yes	-.201	.256	-.788	.431	.026	.273	.095	.924
Education: Below associate	Education: Bachelor or above	-.598	.573	-1.043	.297	-1.374	.613	-2.243	.025
Education: Associate	Education: Bachelor or above	.204	.217	.937	.349	.091	.232	.394	.694
Major: Not ECE	Major: ECE	.200	.338	.591	.555	-.247	.361	-.684	.494
Certification: No	Certification: Yes	-1.379*	.510	-2.701	.007	-.436	.545	-.800	.424
Years of teaching experience	--	.037*	.015	2.563	.010	.062*	.016	3.967	.000
SE Curriculum: No	SE Curriculum: Yes	-.812	.452	-1.797	.072	-1.064*	.478	-2.226	.026
Child-to-teacher ratio	--	-.040	.040	-.996	.319	-.068	.043	-1.596	.111
Children with disabilities: No	Children with disabilities: Yes	.696*	.261	2.666	.008	.753*	.279	2.701	.007
Children with PCB: No	Children with PCB: Yes	-.091	.195	-.466	.641	.158	.208	.758	.449
Child age (4-5 years)	Child age (3-4 years)	.556*	.247	2.253	.024	.728*	.264	2.762	.006
Child age (5-6 years)	Child age (3-4 years)	.555*	.253	2.198	.028	1.044*	.270	3.871	.000
Child age (6-7 years)	Child age (3-4 years)	.239	.334	.715	.475	.480	.357	1.343	.179
Child age (mixed)	Child age (3-4 years)	.922	.811	1.138	.255	1.514	.863	1.755	.079
<i>Level 2 (Preschool Level)</i>									
City: Ningbo	City: Beijing	.527	.282	1.866	.062	.385	.295	1.303	.193
Region: Rural	Region: Urban	.052	.309	.168	.866	.070	.323	.216	.829
Funding source: Private	Funding source: Public	-.110	.360	-.307	.759	-.312	.376	-.829	.407
Quality rating: Good	Quality rating: Excellent	.045	.301	.149	.881	.069	.314	.221	.825
Quality rating: Unrated	Quality rating: Excellent	-.053	.538	-.099	.921	.139	.564	.246	.806

Note: ECE = early childhood education; PCB = persistent challenging behavior; SE curriculum = social-emotional curriculum. * $p < .05$.

Table 4-15. Multilevel results for the Interventions for Children with Persistent Challenging Behavior subscale.

Random Effect	Reference Group (Categorical variables)	How Often section (Possible score range = 5 to 30)				How Confident section (Possible score range = 5 to 30)			
		Coefficient	SE	t	p	Coefficient	SE	t	p
Intercept	--	19.417	.821	23.662	.000	19.980	.831	24.042	.000
<i>Level 1 (Teacher/classroom Level)</i>									
Role: Assistant teacher	Role: Lead teacher	-.051	.351	-.145	.885	-.083	.352	-.236	.813
Role: Other	Role: Lead teacher	-.840	.461	-1.823	.068	-.578	.462	-1.252	.211
Professional title: No	Professional title: Yes	-.680	.397	-1.714	.086	-.650	.399	-1.628	.103
Education: Below associate	Education: Bachelor or above	.188	.896	.210	.834	-.629	.898	-.700	.484
Education: Associate	Education: Bachelor or above	.642	.337	1.903	.057	.791*	.339	2.335	.020
Major: Not ECE	Major: ECE	-.117	.527	-.223	.824	-.463	.528	-.876	.381
Certification: No	Certification: Yes	-.273	.796	-.342	.732	1.078	.799	1.350	.177
Years of teaching experience	--	-.033	.023	-1.459	.145	-.013	.023	-.567	.571
SE Curriculum: No	SE Curriculum: Yes	-.673	.691	-.974	.330	-.936	.699	-1.339	.181
Child-to-teacher ratio	--	-.033	.062	-.526	.599	-.030	.062	-.481	.631
Children with disabilities: No	Children with disabilities: Yes	.989*	.407	2.430	.015	.873*	.408	2.139	.032
Children with PCB: No	Children with PCB: Yes	-.038	.305	-.125	.901	.156	.305	.511	.609
Child age (4-5 years)	Child age (3-4 years)	.714	.385	1.855	.064	.555	.386	1.436	.151
Child age (5-6 years)	Child age (3-4 years)	.548	.394	1.391	.164	.349	.395	.884	.377
Child age (6-7 years)	Child age (3-4 years)	-.092	.522	-.176	.861	-.485	.523	-.926	.354
Child age (mixed)	Child age (3-4 years)	.968	1.254	.772	.440	.885	1.262	.701	.483
<i>Level 2 (Preschool Level)</i>									
City: Ningbo	City: Beijing	.101	.417	.242	.809	.049	.431	.113	.910
Region: Rural	Region: Urban	.282	.455	.620	.535	.203	.471	.431	.667
Funding source: Private	Funding source: Public	.919	.528	1.739	.082	.441	.548	.805	.421
Quality rating: Good	Quality rating: Excellent	.191	.438	.435	.664	.136	.455	.298	.766
Quality rating: Unrated	Quality rating: Excellent	-.343	.797	-.431	.666	.189	.822	.230	.818

Note: ECE = early childhood education; PCB = persistent challenging behavior; SE curriculum = social-emotional curriculum. * $p < .05$.

Table 4-16. Multilevel results for the Supporting Family subscale.

Random Effect	Reference Group (Categorical variables)	How Often section (Possible score range = 7 to 42)				How Confident section (Possible score range = 7 to 42)			
		Coefficient	SE	t	p	Coefficient	SE	t	p
Intercept	--	29.766	1.084	27.452	.000	29.262	1.087	26.922	.000
<i>Level 1 (Teacher/classroom Level)</i>									
Role: Assistant teacher	Role: Lead teacher	-.439	.449	-.978	.328	-.548	.455	-1.204	.229
Role: Other	Role: Lead teacher	-1.852*	.590	-3.141	.002	-1.323*	.598	-2.213	.027
Professional title: No	Professional title: Yes	-.706	.512	-1.377	.169	-.481	.518	-.927	.354
Education: Below associate	Education: Bachelor or above	-.323	1.144	-.282	.778	-1.373	1.162	-1.181	.237
Education: Associate	Education: Bachelor or above	.953*	.433	2.199	.028	1.039*	.439	2.366	.018
Major: Not ECE	Major: ECE	-.262	.673	-.389	.697	-.521	.683	-.762	.446
Certification: No	Certification: Yes	-.374	1.018	-.367	.713	1.403	1.033	1.358	.174
Years of teaching experience	--	.012	.029	.400	.689	.046	.029	1.563	.118
SE Curriculum: No	SE Curriculum: Yes	-1.398	.906	-1.543	.123	-1.535	.912	-1.683	.092
Child-to-teacher ratio	--	-.104	.080	-1.296	.195	-.159*	.081	-1.961	.050
Children with disabilities: No	Children with disabilities: Yes	1.188*	.521	2.280	.023	1.253*	.528	2.371	.018
Children with PCB: No	Children with PCB: Yes	-.208	.388	-.534	.593	.186	.395	.472	.637
Child age (4-5 years)	Child age (3-4 years)	1.024*	.491	2.085	.037	.985*	.499	1.975	.048
Child age (5-6 years)	Child age (3-4 years)	1.149*	.502	2.288	.022	1.116*	.510	2.187	.029
Child age (6-7 years)	Child age (3-4 years)	.018	.665	.027	.979	-.052	.675	-.077	.939
Child age (mixed)	Child age (3-4 years)	2.506	1.621	1.546	.122	1.876	1.639	1.145	.252
<i>Level 2 (Preschool Level)</i>									
City: Ningbo	City: Beijing	.696	.589	1.182	.237	.763	.576	1.325	.185
Region: Rural	Region: Urban	.405	.645	.628	.530	.332	.630	.527	.599
Funding source: Private	Funding source: Public	.495	.752	.658	.511	.047	.734	.064	.949
Quality rating: Good	Quality rating: Excellent	.340	.628	.542	.588	.491	.611	.803	.422
Quality rating: Unrated	Quality rating: Excellent	-.079	1.118	-.071	.943	.726	1.096	.663	.508

Note: ECE = early childhood education; PCB = persistent challenging behavior; SE curriculum = social-emotional curriculum. * $p < .05$.

Table 4-17. Frequency and percentage of supports needed by Chinese preschool teachers with different characteristics.

Types of Supports	Teacher's Role			Professional Title		Level of Education ^a			Major ^a		Certification ^a	
	LT	AT	Other	Yes	No	≥Bachelor	<Associate	Associate	ECE	N-ECE	Yes	No
A specific social-emotional curriculum	403 (49.80%)	256 (45.20%)	82 (38.50%)	494 (50.30%)	246 (40.70%)	490 (49.00%)	12 (24.00%)	239 (44.50%)	687 (48.00%)	54 (34.60%)	723 (47.70%)	18 (24.70%)
Systematic preservice training	73 (9.00%)	68 (12.00%)	23 (10.80%)	75 (7.60%)	89 (14.70%)	99 (9.90%)	5 (10.00%)	60 (11.20%)	137 (9.60%)	27 (17.30%)	154 (10.20%)	10 (13.70%)
Attention and support from preschool principals	21 (2.60%)	10 (1.80%)	9 (4.20%)	27 (2.70%)	13 (2.20%)	23 (2.30%)	1 (2.00%)	16 (3.00%)	36 (2.50%)	4 (2.60%)	39 (2.60%)	1 (1.40%)
Family's support and cooperation	176 (21.80%)	135 (23.90%)	51 (23.90%)	213 (21.70%)	149 (24.70%)	208 (20.80%)	20 (40.00%)	134 (25.00%)	323 (22.60%)	39 (25.00%)	334 (22.00%)	28 (38.40%)
Inservice coaching from experienced practitioners	47 (5.80%)	40 (7.10%)	19 (8.90%)	61 (6.20%)	45 (7.50%)	58 (5.80%)	8 (16.00%)	40 (7.40%)	92 (6.40%)	14 (9.00%)	96 (6.30%)	10 (13.70%)
Inservice training from research experts	89 (11.00%)	57 (10.10%)	29 (13.60%)	113 (11.50%)	62 (10.30%)	123 (12.30%)	4 (8.00%)	48 (8.90%)	157 (11.00%)	18 (11.50%)	169 (11.20%)	6 (8.20%)
Chi-square test	$\chi^2 = 16.899$ $df = 10$ $p = .077$			$\chi^2 = 28.941$ $df = 5$ $p < .001$		$\chi^2 = 28.726$ $df = 10$ $p = .001$		$\chi^2 = 15.077$ $df = 5$ $p = .008$		$\chi^2 = 22.726$ $df = 5$ $p = .001$		
Cramer's V	--			.135		.097		.098		.122		
Cohen's ω	--			.135		.137		.098		.122		

Note: LT = lead teacher; AT = assistant teacher; ECE = early childhood education; N-ECE = other than early childhood education. ^a indicated the Fisher–Freeman–Halton Exact test was used because the assumption (i.e., expected frequency is at least 5 per cell) was violated.

Table 4-18. Frequency and percentage of supports needed by Chinese preschool teachers in different classrooms.

Types of Supports	SE Curriculum ^a		Child Age ^a					Children with Disabilities		Children with Persistent CB	
	Yes	No	3-4 years	4-5 years	5-6 years	6-7 years	Mixed age	Yes	No	Yes	No
A specific social-emotional curriculum	37 (42.00%)	704 (46.90%)	194 (44.00%)	212 (45.10%)	230 (50.50%)	98 (49.20%)	7 (31.80%)	99 (39.60%)	640 (47.90%)	466 (46.20%)	271 (47.50%)
Systematic preservice training	12 (13.60%)	152 (10.10%)	53 (12.00%)	47 (10.00%)	49 (10.80%)	12 (6.00%)	3 (13.60%)	26 (10.40%)	138 (10.30%)	104 (10.30%)	58 (10.20%)
Attention and support from preschool principals	4 (4.50%)	36 (2.40%)	14 (3.20%)	14 (3.00%)	9 (2.00%)	3 (1.50%)	0 (0.00%)	8 (3.20%)	32 (2.40%)	23 (2.30%)	17 (3.00%)
Family's support and cooperation	17 (19.30%)	345 (23.00%)	105 (23.80%)	111 (23.60%)	92 (20.20%)	46 (23.10%)	7 (31.80%)	62 (24.80%)	300 (22.50%)	244 (24.20%)	117 (20.50%)
Inservice coaching from experienced practitioners	6 (6.80%)	100 (6.70%)	26 (5.90%)	34 (7.20%)	30 (6.60%)	13 (6.50%)	3 (13.60%)	23 (9.20%)	82 (6.10%)	68 (6.70%)	37 (6.50%)
Inservice training from research experts	12 (13.60%)	163 (10.90%)	49 (11.10%)	52 (11.10%)	45 (9.90%)	27 (13.60%)	2 (9.10%)	32 (12.80%)	143 (10.70%)	103 (10.20%)	70 (12.30%)
Chi-square test	$\chi^2 = 4.52$ $df = 5$ $p = .460$		$\chi^2 = 18.425$ $df = 20$ $p = .517$					$\chi^2 = 7.983$ $df = 5$ $p = .157$		$\chi^2 = 4.451$ $df = 5$ $p = .487$	
Cramer's V	--		--					--		--	
Cohen's ω	--		--					--		--	

Note: CB = challenging behavior; SE curriculum = social-emotional curriculum. ^a indicated the Fisher–Freeman–Halton Exact test was used because the assumption (i.e., expected frequency is at least 5 per cell) was violated.

Table 4-19. Frequency and percentage of supports needed by Chinese preschool teachers from different preschools.

Types of Supports	City		Region		Funding Source		Quality Rating ^a		
	Beijing	Ningbo	Urban	Rural	Public	Private	Excellent	Good	Unrated
A specific social-emotional curriculum	315 (43.40%)	426 (49.40%)	534 (47.50%)	207 (44.60%)	643 (49.70%)	98 (33.30%)	369 (52.10%)	328 (44.70%)	44 (30.10%)
Systematic preservice training	87 (12.00%)	77 (8.90%)	122 (10.90%)	42 (9.10%)	125 (9.70%)	39 (13.30%)	71 (10.00%)	71 (9.70%)	22 (15.10%)
Attention and support from preschool principals	27 (3.70%)	13 (1.50%)	29 (2.60%)	11 (2.40%)	35 (2.70%)	5 (1.70%)	19 (2.70%)	18 (2.50%)	3 (2.10%)
Family's support and cooperation	156 (21.50%)	206 (23.90%)	237 (21.10%)	125 (26.90%)	268 (20.70%)	94 (32.00%)	130 (18.40%)	188 (25.60%)	44 (30.10%)
Inservice coaching from experienced practitioners	58 (8.00%)	48 (5.60%)	76 (6.80%)	30 (6.50%)	85 (6.60%)	21 (7.10%)	47 (6.60%)	44 (6.00%)	15 (10.30%)
Inservice training from research experts	82 (11.30%)	93 (10.80%)	126 (11.20%)	49 (10.60%)	138 (10.70%)	37 (12.60%)	72 (10.20%)	85 (11.60%)	18 (12.30%)
Chi-square test	$\chi^2 = 18.828$ $df = 5$ $p = .002$		$\chi^2 = 6.787$ $df = 5$ $p = .237$		$\chi^2 = 31.960$ $df = 5$ $p < .001$		$\chi^2 = 34.565$ $df = 10$ $p < .001$		
Cramer's <i>V</i>	.109		--		.142		.144		
Cohen's ω	.109		--		.141		.146		

Note: ^a indicated the Fisher–Freeman–Halton Exact test was used because the assumption (i.e., expected frequency is at least 5 per cell) was violated.

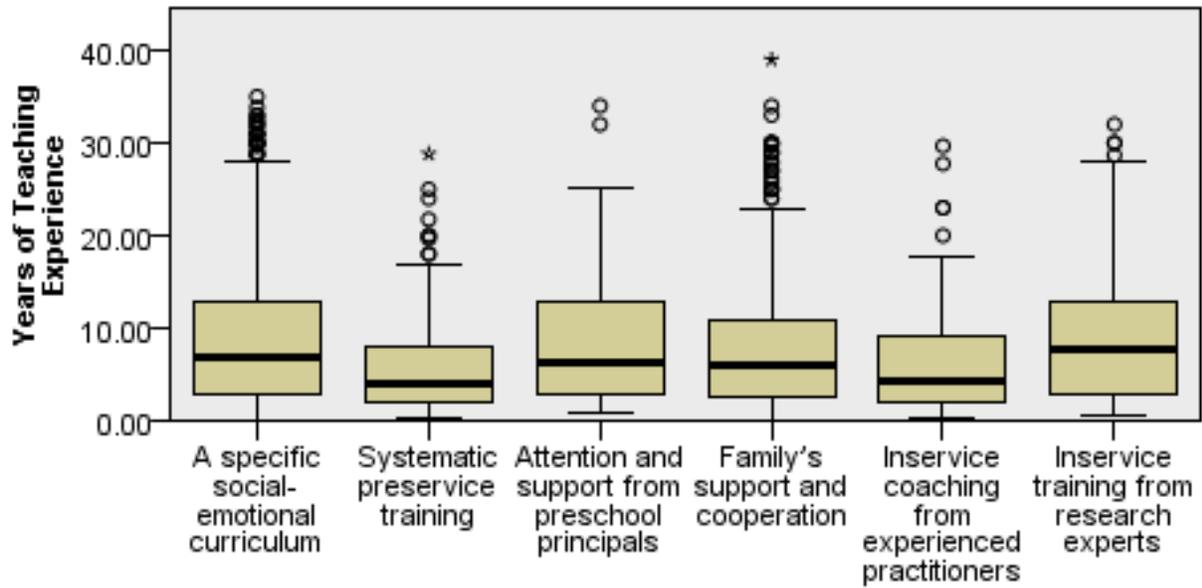


Figure 4-1. Boxplot for Kruskal-Wallis test on years of teaching experience.

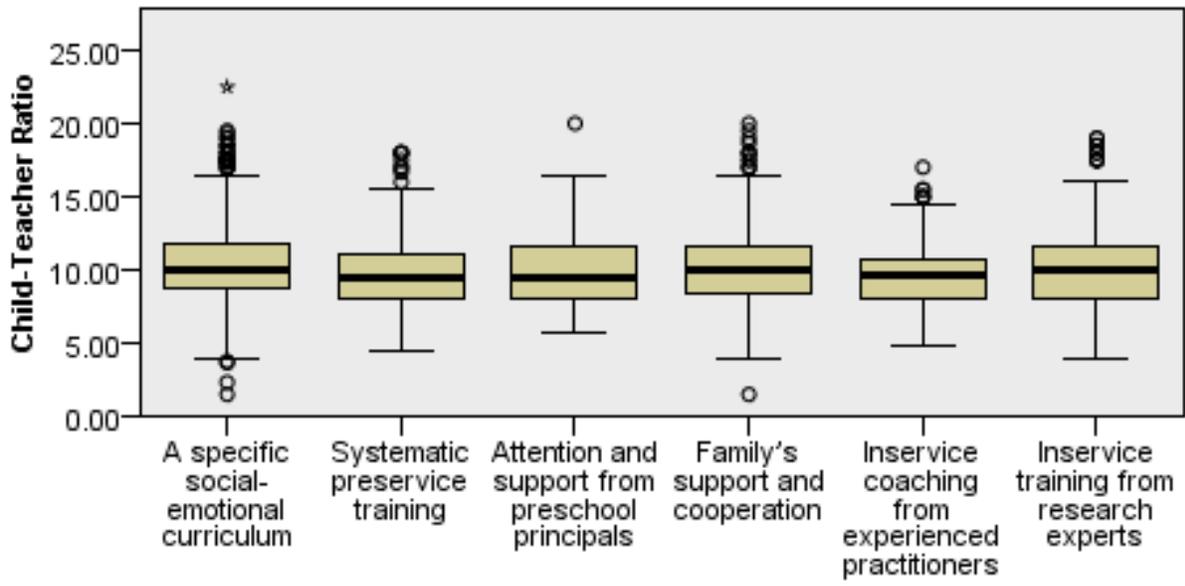


Figure 4-2. Boxplot for Kruskal-Wallis test on child-to-teacher ratio.

CHAPTER 5 DISCUSSION

The primary purpose of the present study was to examine Chinese preschool teachers' perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practice aligned with the *Pyramid Model* (Fox et al., 2010; Hemmeter et al., 2014) and two nationally recognized and influential Chinese early childhood learning standards documents by using the SETP-C. A secondary goal of the present study was to gather preliminary psychometric integrity evidence for this author-developed measurement instrument. The present study employed a descriptive survey design. The target population for the current study was preschool teachers from Beijing and Ningbo. All teachers from 120 randomly selected preschools in Beijing and Ningbo were invited to participate in the present study. Study research questions were addressed with cross-sectional data from an analytic sample of 1,599 Chinese preschool teachers from the randomly selected preschools who completed either the paper-and-pencil version or the electronic version of the SETP-C.

Confirmatory factor analysis (CFA) was used to provide score validity evidence for the internal structure of the SETP-C. Four proposed CFA models were tested and compared by using chi-square difference model comparison tests, in which model fit indices were used as interpretation aids to complement chi-square statistics. Given the 70 teaching practices items on the SETP-C were rated using frequency and confidence anchors, all data analyses were conducted separately for responses to the How Often section and the How Confident section. Following the identification of the best fitting model, descriptive analyses of derived composite scores were conducted to investigate the sample of Chinese preschool teachers' reported frequency of use and

implementation confidence for the latent variables. Multilevel modeling analyses were used to examine relationships between various teacher, classroom, and preschool characteristics and teachers' ratings of frequency and confidence across the latent variables. On the SETP-C, Chinese preschool teachers were asked to report the types of support they needed to better implement preschool social education. Non-parametric tests were used to examine the association between variables (teacher, classroom, and preschool characteristics) and types of supports reported by Chinese preschool teachers.

In this chapter, findings from the present study are interpreted, implications of the findings are discussed, limitations are acknowledged, and recommendations for future research are presented, followed by a summary of the study. Findings associated with each research question are integrated within each section.

Interpretation of Findings

The present study is the first study in which a sample of Chinese preschool teachers from randomly selected preschools in Beijing and Ningbo provided their perspectives about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practice as measured by the SETP-C. Therefore, direct comparisons of findings from the present study using the SETP-C and findings reported in previous research are not possible. Findings are interpreted in relation to previous empirical studies on preschool teachers' use of the *Pyramid Model* practices in mainland China and in other countries, as well as existing research that used a similar measurement instrument (e.g., self-report instrument developed based on the TPOT) and prior studies in which similar constructs were measured (e.g., teacher-child interaction, classroom practices).

Psychometric Evidence for the SETP-C

Prior to data collection for the present study, considerable efforts were made, as describe in Chapter 3, to develop and validate the SETP-C scores. In the present study, the final version of the SETP-C that included 70 teaching practices items was administered using either a paper-and-pencil or an online format. To examine the score validity evidence for the SETP-C based on its internal structure, four proposed CFA models were evaluated and compared. The results yielded consistent evidence in favor of a seven-factor model interpretation of the SETP-C, suggesting the SETP-C provides a measure of seven latent variables related to preschool social, emotional, and behavioral teaching practices. The RMSEA, CFI, and TLI indices indicated good model fit for the seven-factor solution. Further, chi-square difference model comparison tests and practical improvement of TLI indices revealed that the seven-factor model was a superior fitting model. Given the seven-factor model was supported both statistically and substantively, it was selected as the best fitting model for the present study and was retained for the remaining analyses. Seven correlated latent variables were identified that corresponded to (a) building positive relationships with children, families, and colleagues (labeled the Nurturing and Responsive Relationships subscale); (b) providing environments and teaching practices that support children’s engagement in classroom activities and routines (labeled the Supportive Classroom Environment subscale); (c) providing explicit instruction in a variety of social skills and emotional competencies that are both developmentally appropriate and culturally valued (labeled the Social-Emotional Instructional Content subscale); (d) using effective and comprehensive strategies and approaches to teach social skills and emotional competencies (labeled the Social-Emotional Instructional Strategies subscale); (e) using

evidence-based strategies to deal with challenging behavior (labeled the Responses to Challenging Behavior subscale); (f) developing individualized interventions for children with persistent challenging behavior (labeled the Interventions for Children with Persistent Challenging Behavior subscale); and (g) supporting family use of social, emotional, and behavioral teaching practices at home and in the community (labeled the Supporting Family subscale).

Given the SETP-C was developed and administered for the first time in the present study, it is not possible to directly compare and contrast findings regarding psychometric evidence reported in the present study and evidence from previous studies. However, the SETP-C was developed based on practices included as part of the *Pyramid Model* framework and an observation- and intervention-informed, judgment-based rating scale (i.e., TPOT-P, Fox et al., 2008).

Findings from the present study are interpreted with respect to the very limited number of existing studies conducted using similar self-report measurement instruments. Although the item sets for the present study differed from those used in other studies, similar and comparable latent variables were found in other studies, but they were labeled differently. For example, Heo et al. (2014) developed a questionnaire based on 38 items included on the TPOT-P to assess Korean early childhood teachers' perspectives about the importance and implementation of social, emotional, and behavioral teaching practices associated with the *Pyramid Model*. Exploratory factor analysis was conducted using data from the sample of 256 Korean early childhood teachers (Heo et al., 2014). Four latent variables were identified and labeled (a) Responsive Interactions, (b) Classroom Preventive Practices, (c) Social-Emotional

Teaching Strategies, and (d) Individualized Interventions. Close inspection of questionnaire items associated with these four latent variables suggest they were generally comparable to the Nurturing and Responsive Relationships subscale, the Supportive Classroom Environment subscale, the Social-Emotional Instructional Content subscale, and the Interventions for Children with Persistent Challenging Behavior subscales that were found in the present study.

An examination of the factor loadings for each item associated with one of the latent variable subscales proposed in the seven-factor model indicated strong and statistically significant associations between items and latent variables, suggesting these items are good indicators of the latent variables intended to be measured. Furthermore, in the present study, internal consistency score reliability for each of the seven SETP-C derived latent variable subscales was estimated based on classical test theory and a factor analytic model approach. According to commonly accepted indices (DeVellis, 2012; George & Mallery, 2003; Kline, 2000), Cronbach's alpha was in the excellent range ($\alpha \geq 0.9$) for almost all of the derived latent variable subscales across the How Often and How Confident sections, indicating high inter-item correlations within subscales. The exception was one alpha coefficient that was in the good range ($0.9 > \alpha \geq 0.8$). The omega coefficient for each latent variable subscale was found to be very high (all exceeded .90), providing further evidence for a high degree of internal consistency score reliability.

Taken together, findings from the psychometric analyses of SETP-C scores in the present study suggest the SETP-C provides a multidimensional measure of preschool social, emotional, and behavioral teaching practices. In this sample of

Chinese preschool teachers, the SETP-C measured seven correlated latent variables of the underlying construct that were psychometrically and conceptually distinct. Given substantial efforts have been undertaken in the development and validation of the SETP-C, it was not unexpected that items on the SETP-C appear to be good indicators of the latent variables. Findings from the present study suggest the SETP-C shows promise for measuring Chinese preschool teacher's frequency of and confidence in use of social, emotional, and behavioral teaching practices.

Some limitations in the generalization of these psychometric findings should be noted, however. The sample in the present study was predominantly Chinese teachers from urban areas, who majored in early childhood education, and who were highly educated. Chinese teachers with a professional title were also overrepresented in the present study, when compared to the national data.

Further validation of the SETP-C that involves teacher participants from more diverse economic, geographic, program, and educational backgrounds in China will provide important incremental validity evidence to enhance applicability and generalizability of data obtained. Also, the validation method used in the present study did not include a step to explore convergent score validity evidence between the SETP-C and other instruments measuring similar constructs. Moreover, the present study does not provide information about the consistency of the SETP-C scores over time, given this study only involved cross-sectional data collection.

Frequency of Use and Implementation Confidence

Consistent with previous evidence on the intercorrelations among key practice items and subscales included on the TPOT (Hemmeter et al., 2014; Luo et al., 2017), findings from this study suggest latent variable subscales of the SETP-C correlated with

each other in expected and theoretically meaningful ways; some latent variable subscales were highly correlated, whereas some had moderate correlations. Among the seven latent variable subscales of the SETP-C, the present study sample of Chinese preschool teachers were not only less likely to develop and conduct individualized interventions for children with persistent challenging behavior, but also reported the lowest confidence in implementing teaching practices associated with this subscale. This finding supports a previous observational study showing a small sample of Chinese preschools in Beijing were rated very low on the Supporting Children with Persistent Challenging Behavior item on the TPOT-P (Luo et al., 2017). Similar results were also found in previous survey studies conducted in other countries. For example, Korean early childhood teachers reported less frequent use of teaching practices related to individualized interventions for children with persistent challenging behavior when compared to the other practices (Heo et al., 2014). Faculty members from 2- and 4-year higher education programs in the United States reported their graduates were better prepared on topics such as working with families, preventive practices, and supporting social-emotional development of young children, but were less prepared to work with young children who exhibited persistent challenging behavior (Hemmeter et al., 2008).

According to the *Law of the People's Republic of China on the Protection of Disabled Persons*, children eligible for special education in mainland China fall into eight categories of disability: visual impairment, hearing impairment, speech impairment, physical disability, mental retardation, psychiatric disability, multiple disabilities, and other disabilities (National People's Congress, 1990). Neither developmental delays in social-emotional development nor emotional disturbances are recognized as disability

categories (Deng, Poon-McBrayer, & Farnsworth, 2001). Generally speaking, Chinese preschool teachers have not been expected to develop individualized interventions for children with the most persistent and severe challenging behavior, in the absence of a program-wide school psychologist, behavior specialist, consultation service, or intervention program.

In the present study, SETP-C items associated with the secondary or prevention level of the *Pyramid Model* practices (i.e., targeted social-emotional supports) were divided into two domains: (a) the Social-Emotional Instructional Content subscale, which was focused on the What to Teach component of instruction (i.e., skills targeted for instruction); and (b) the Social-Emotional Instructional Strategies subscale that emphasized the How to Teach component of instruction (e.g., instructional procedures and strategies). In contrast with findings from existing observational studies using the TPOT (Artman-Meeker et al., 2014; Hemmeter et al., 2016; Luo et al., 2017), however, findings from the present study suggest this sample of Chinese preschool teachers more often implement and feel more confident in their use of teaching practices associated with the Social-Emotional Instructional Content subscale and the Responses to Challenging Behavior subscale, compared with the universal promotion practices related to nurturing and responsive relationships and a high-quality supportive environment. On one hand, this finding might be a reflection of the findings indicating discrepancy between teachers' reported use and observed use of classroom practices (Debnam, Pas, Bottiani, Cash, & Bradshaw, 2015; Luo et al., 2017; Wang & Sogin, 1997). On the other hand, although data collected in the present study were anonymous, self-reported answers can often be exaggerated. Further, various biases might affect

data from self-report measures, especially social desirability bias, in which teachers were potentially responding in a manner that would favor their preschool administrators' views. In the present study, Chinese teachers were contacted by their principals to complete the SETP-C.

Overall, this sample of Chinese teachers' ratings of frequency was slightly higher than their ratings of confidence across latent variable subscales. Furthermore, a statistically significant correlation existed between teachers' reported frequency and confidence across each of the latent variables subscales. The teaching practices that the present study sample reported they were more confident in implementing were also those they reported more frequently employing. This finding might be reflective of existing evidence showing the effect of the frequency of use of teachers' instructional activities and strategies on their sense of efficacy or confidence (Emmer & Hickman, 1991; Holzberger, Philipp, & Kunter, 2013; Wertheim & Leyser, 2002).

Teacher, Classroom, and Preschool Variables Associated with Reported Frequency and Confidence

The extent to which various within- and between-preschool variables were associated with teachers' reported frequency of use and implementation confidence was explored by using multilevel model analyses. A salient finding from analysis of the within- and between-preschool differences was that most variance was found within preschools. This suggests a need for more attention to within-preschool variables. Several of the within-preschool variables (including both teacher and classroom characteristics) were found to be significantly related to teachers' reported frequency of and confidence in implementing social, emotional, and behavioral teaching practices as measured by the SETP-C.

Results from the present study suggest certification in early childhood education, years of teaching experience, use of a social-emotional curriculum, child-to-teacher ratio, and child age in the classroom were significant predictors of the present study sample's reported frequency and confidence across several SETP-C subscales. These findings were supported by previous research conducted in mainland China and other countries on factors associated with preschool teachers' frequency of use of classroom practices (e.g., Burchinal, Cryer, Clifford, & Howes, 2002; Heo et al., 2014; Hu, Fan, Wu, & Yang, 2017; Hu, Wu, Su, & Roberts, 2017; Kim, Stormont, & Espinosa, 2009; Mohamed & Al-Qaryouti, 2016; Phillipson, Burchinal, Howes, & Cryer, 1997; Wenz-Gross & Upshur, 2012).

In the present study, teachers' instructional role in the classroom was associated with their reported frequency and confidence. Lead teachers tended to endorse more frequent use of teaching practices and reported higher practice confidence than did teachers who identified themselves as roles other than lead and assistant teachers, such as child-care workers. This result is logical due to the designated responsibilities of most child-care workers in Chinese preschool classrooms. In mainland China, child-care workers are generally not recognized as "teachers." Their major responsibilities are related to personal care, such as serving snacks/meals, engaging in cleaning/sanitizing, assisting with toileting/diapering, and performing other health-related practices (Li & Yang, 2007).

An unexpected finding from the present study was that teachers with an associate's degree were more likely to implement and felt more confident in supporting families to use social, emotional, and behavioral teaching practices, as compared to

teachers who had a bachelor's degree or a graduate degree. This result is different from previous research (e.g., Blau, 2000; Early et al., 2016; Hu, Fan, Yang, & Neitzel, 2017; Slot, Leseman, Verhagen, & Mulder, 2015), which has shown a positive and significant relationship between teachers' level of education and their classroom practices. There are a number of possible reasons for these contradictory findings. First, it could be related to the various ways teacher education has been measured leading to difficulty in comparing findings across studies (Maxwell, Field, & Clifford, 2005). For example, some studies calculated total years of education, some categorized the highest degree earned, whereas others distinguished teachers with or without a bachelor's degree. Second, although these studies targeted teachers' behaviors in the classroom, the specific classroom practices that have been measured vary dramatically across studies. Regarding the present study, the focus of teachers' classroom practices was promoting social, emotional, and behavioral competence of young children. It is possible that the pattern of association between teachers' educational level and their implementation of social, emotional, and behavioral teaching practices appear different than the association between teachers' educational level and other teaching practices.

Teachers in the present study who had classrooms where no children with disabilities were enrolled reported more frequent use of practices and a higher level of practice confidence than did those in classrooms where children with and without disabilities were enrolled. This finding with respect to the inclusion of children with disabilities contrasts with Heo et al.'s (2014) finding showing Korean early childhood teachers who had children with disabilities in their classroom reported implementing more social, emotional, and behavioral teaching practices than teachers from

classrooms without children with disabilities. This finding might be a reflection of the known challenges for Chinese preschool teachers to work with young children with disabilities. In mainland China, most preschools have not adopted inclusion as a service model to meet the needs of young children with disabilities and their families. Chinese preschool teachers typically are not trained in and lack experience with special education populations (Liu, 2012). Researchers have found that Chinese preschool teachers were not well equipped to meet the educational needs of children with disabilities due to lack of knowledge, skills, and resources (Hu, Roberts, Wang, & Zhao, 2011). Another possible explanation might be that teachers who have children with disabilities in their classrooms might be more aware of the difficulties of teaching all children social, emotional, and behavioral skills (Yan, 2008; Zhou, 2006).

Several teacher and classroom characteristics had little or no relation to teachers' reported frequency of and confidence in implementing social, emotional, and behavioral teaching practices, such as teacher's professional title, major, and inclusion of children with persistent challenging behavior. In mainland China, professional title is a certain position granted by education administration authority, signifying individual teachers' professional expertise, practical skills, and work performance. However, Chinese teachers from public preschools or urban areas have benefited largely by local professional title evaluation systems and are offered more opportunities to receive a professional title (Han, Zhang, & Yang, 2015; Hong et al., 2015). In the present study, the finding about the relationship between teachers' major and teachers' ratings of frequency and confidence should be interpreted with caution because this Chinese sample predominantly was teachers with an early childhood education major. Given the

typically large class size in a Chinese preschool classroom (e.g., 25 to 35 children), it is not unexpected that having a very small proportion of children who persistently exhibited challenging behavior in the classroom was not predictive of teachers' reported frequency and confidence, especially when the majority of teachers in the present study reported having children with persistent challenging behavior in their classrooms.

Although a few group differences were found based on the city from which sample respondents came, results from the present study indicate most preschool-level features (i.e., region, funding source, and quality level) were not significantly related to Chinese preschool teachers' reported frequency and confidence. Preschool teachers' implementation of social, emotional, and behavioral teaching practices might be associated with policies or curriculum guidance specific to a particular city (Fox et al., 2011), which might explain the few significant differences between Beijing and Ningbo. Given the two cities involved in the present study were among the most economically developed cities in mainland China, it was not unexpected that no significant differences were found between teachers from preschools located in urban areas and rural areas, as well as between teachers who worked in public and private preschools. Theoretically, the quality of preschool program would have been expected to be associated with teachers' use of classroom practices. One possible explanation for the between the quality of preschool and practice frequency and confidence might be the provincial preschool quality rating systems in Beijing and Ningbo primarily assess the structural aspect of program quality, including value orientation, physical environment, personal qualifications, and management, with less emphases on teacher-child interactions or

process quality, which is more aligned with social, emotional, and behavioral teaching practices (Hu, 2015; Pan, Liu, & Lau, 2010).

Types of Supports Teachers Needed

In the present study, teachers were asked to report the most needed types of supports that would assist them in better implementing preschool social education. A specific social-emotional curriculum was the highest rated type of support identified. In mainland China, young children's social competence has received increasing attention over the past three decades and has been emphasized as an independent domain in preschool curricula (Li, 2006). Although consensus has been reached on the importance of a specialized approach in preschool social education, instruction in social-emotional competence was more likely to be embedded into other curricula domains (Sun & Hu, 2015; Ye, 2012). Chinese literature suggests that the social domain is the most difficult domain for preschool teachers to teach among the five curricular domains and that preschool teachers lack strategies for teaching skills associated with social competence (Ji, 2011; Tian, 2013). One possible reason might be the lack of curricula and supplemental materials specifically designed for promoting social-emotional development and learning of preschool children (Li, Liu, & Feng, 2009). Evidence of a lack of preschool social-emotional curriculum was further supported by data in the present study, which showed only 5.5% of participating teachers reported that they were currently implementing a named social-emotional curriculum in their classrooms during the period of data collection.

The second primary request in terms of types of supports needed was family's support and cooperation. In mainland China, program-family partnership has been highly valued in preschool social education for a long time (Liu, 2008). As an important

component of preschool social education, family involvement is fundamental for the social, emotional, and behavioral development of children. In China's *Guidance*, it is clearly stipulated that families are crucial education partners, and preschools should seek families' understanding, support, and involvement, as well as promoting families' capacities to educate their child (Ministry of Education, 2001). Preschool teachers in mainland China have generally accepted these principles with respect to social education, including (a) teachers and parents are the most important models in preschool children's social-emotional learning, their behavior may directly and indirectly affect children; and (b) effective social-emotional instruction cannot be achieved in early care and education programs alone, it needs the cooperation of the family and even the whole community (Liu, 2007). Therefore, it is logical that Chinese preschool teachers identify family's support and cooperation as a needed support for social education.

It is important to note that Beijing and Ningbo are economically powerful and well-developed cities in mainland China and have been ranked as the 2nd and 16th top cities by gross domestic product among hundreds of mainland Chinese big cities (China Internet Watch Team, 2016). Considering the remarkable diversity in socioeconomic development across mainland China, preschool teachers in Beijing and Ningbo who completed the SETP-C were not representative of the population of mainland China preschool teachers. The majority of participating teachers were recruited from public preschools located in urban areas and these preschools have received quality ratings of either "excellent" or "good." As compared to the national population, preschool teachers involved in the present study were highly educated and qualified. Therefore, findings presented could not be generalized to all Chinese preschool teachers.

Implications from the Present Study for Practice and Policy

The present study is among the first in which Chinese preschool teachers' reported frequency of use and confidence with implementing social, emotional, and behavioral teaching practices were examined. The associations between teacher, classroom, and preschool characteristics and teachers' reported frequency and confidence were also investigated. Findings from the present study may offer meaningful insights relevant to early childhood practice and policy in the Chinese socio-cultural context.

Practice Implications of Findings

The present study has provided some encouraging results related to the preliminary psychometric evidence for the SETP-C, which includes multicomponent preschool social, emotional, and behavioral teaching practices. Using the *Pyramid Model* as a conceptual framework, a comprehensive array of teaching practices in preschool classrooms are related to promoting social-emotional competence and addressing challenging behavior of preschool children, which are not limited to “circle time” lessons.

A universally accepted principle of preschool social education in mainland China is that social-emotional development and education for young children should be an integrative and interconnecting area that involves all daily teaching and learning activities (Liu, 2017). Aligned with this principle, findings from the present study indicate comprehensive and inter-correlated social, emotional, and behavioral teaching practices can be categorized into several domains related to (a) building nurturing and responsive relationships; (b) creating a supportive classroom environment; (c) providing explicit social-emotional instruction; (d) using effective strategies and approaches to teach

social-emotional competence; (e) using evidence-based strategies in response to challenging behavior; (f) developing and conducting individualized interventions for children with persistent challenging behavior; and (g) supporting family use of social, emotional, and behavioral teaching practices.

The preschool social, emotional, and behavioral teaching practices included on the SETP-C could be used to inform and organize Chinese preschool teachers' classroom practices for working with young children and their families. Results from the present study support that the SETP-C appears to be a promising instrument for measuring Chinese preschool teachers' perspectives about their social, emotional, and behavioral teaching practices in the classroom. The SETP-C might provide Chinese teachers with a framework for understanding the domains of their teaching practices aimed at promoting the social-emotional and behavioral competence of young children. Further, the SETP-C might be used to provide Chinese teachers with direct feedback about their areas of strength and needs in implementing social, emotional, and behavioral teaching practices.

Preschool teachers must be prepared and supported to implement a range of teaching practices in order to meet the needs of all young children in the classroom, especially for children at risk for social-emotional delays and those who exhibit persistent challenging behavior (Hemmeter & Lox, 2009). Results from the present study might provide guidance for the design and delivery of professional development and ongoing supports to Chinese preschool teachers focused on social, emotional, and behavioral teaching practices. A comprehensive set of professional development supports could be developed around each of the seven domains identified in the

present study, and more attention could be put into particular domains with which Chinese teachers were less likely to endorse, either for frequency or confidence.

The SETP-C can be used as a professional development tool to identify the teaching practices that are in place and areas of focus for training, coaching, or other supports. Then, professional development and ongoing supports could be delivered with a full appreciation for the needs of a diverse population of preschool teachers. Based on the relationships of various teacher, classroom, and preschool characteristics to Chinese teachers' reported frequency and confidence, it might be helpful to identify groups of teachers who are potentially in need of more systematic supports. For example, teachers from classrooms that enroll children with disabilities and teachers who are working with 3- to 4- year-olds might benefit from additional supports. When compared to lead teachers, child-care workers might need more guidance and coaching on how to promote young children's social, emotional, and behavioral competence. Furthermore, it might be necessary to differentiate the form and dosage of professional development supports needed to guide teachers with different amounts of teaching experience or with larger class sizes to implement with fidelity the comprehensive array of practices listed above.

Policy Implications of Findings

Prior to the 1980s, a subject-separate curriculum approach conducted via whole-group lessons was dominant in preschools nationwide in mainland China. However, this approach was criticized for the didactic teaching of academic content and isolating learning from children's everyday life, including their play (Li, Liu, DeBey, McFadden, & Pan, 2016). Since then, preschool curriculum in mainland China has undergone reform and profound changes. Instead of a subject-separate curriculum approach, the

Integrated Theme-Based Curriculum approach is being widely adopted, which has been largely influenced by western theories and models such as the Progressive Education movement, Constructivist theory, developmentally appropriate practice, the Project Approach, and Reggio Emilia (Zhu & Zhang, 2008).

Within the Integrated Theme-Based Curriculum approach, each of the five curricular domains stipulated in *China's Guidance* is connected to a topic that is referred to as a theme. Centered on a theme, learning and teaching activities are integrated across curricular domains over days or weeks or months. One of its major drawbacks is that considerable teacher expertise is required in its development and implementation. Literature suggests among the five Chinese preschool curricular domains, social was reported as the most difficult content area to teach, especially in the case of lacking well-developed social-emotional curricula and supporting materials (Ji, 2011; Tian, 2013). It appears there is a need to develop a domain-based curriculum model that combines the advantages of the subject-separate and theme-based curriculum approaches (Yu, 2017). In the present study, nearly half of Chinese preschool teachers identified a specific social-emotional curriculum as the type of support that they most needed to support their implementation of social education. In mainland China, evidence-based preschool social-emotional curricula/programs/frameworks are greatly needed. Chinese early childhood researchers and practitioners are encouraged to adapt and localize the existing evidence-based curricula/programs/frameworks that have been originally developed in other countries, rather than blindly copying them for Chinese preschools due to different societal, cultural, and educational traditions across countries (Li, Rao, & Tse, 2012). Further, relevant professional development and trainings are

needed to help teachers implement effective curricula and teaching practices.

Policymakers should ensure that technical assistance, resources, and implementation supports are available to help teachers implement these teaching practices with fidelity.

Findings from the present study might help inform policy recommendations related to family involvement in preschool social education. The present study shows an emphasis on building a collaborative relationship with families. As a lifelong source of support for children, families play an essential role in promoting their children's social-emotional development. Family involvement in early childhood education has been linked to children's academic and behavioral outcomes (Fantuzzo, McWayne, Perry, & Childs, 2004; Marcon, 1999; Miedel & Reynolds, 1999). Consistent with the tenets of the *Pyramid Model*, preschool social education is reliant on the participation of families. Exploring the various components of preschool social, emotional, and behavioral teaching practices using the SETP-C has unveiled the importance of family involvement. Supporting family use of social, emotional, and behavioral teaching practices is one of the seven domains identified in the present study. Further, other domains also reflect preschool-family partnership, such as building positive relationships with families. In the present study, family's support and cooperation was reported as the second most needed type of support by teachers. The present study identifies the need for developing partnerships with families. As policymakers make decisions regarding preschool social education, family involvement should always be considered as a key element. Strategies and systems for family involvement within each component of preschool social, emotional, and behavioral teaching practices will ensure these teaching practices are in place in preschool classrooms.

The present study highlights the need to prepare Chinese teachers for working with children with disabilities in preschool settings. Chinese preschool teachers who had children with disabilities in their classrooms rated items lower on the How Often and How Confident sections of the SETP-C. In mainland China, preschool inclusion is in its infancy (Yan, 2007). Studies have noted the majority of Chinese preschool teachers feel unequipped and have not mastered the skills needed to work effectively with children with disabilities, and they were more likely to feel overwhelmed when children with disabilities were enrolled in their classrooms (Yan, 2008; Zhou, 2006). The lack of special education teacher preparation in China might be one reason. For example, Wang (2007) surveyed 137 normal universities and teachers' colleges in mainland China and found only 13.9% of them had offered either compulsory or elective courses on special education. Further, teacher preparation programs in early childhood education and special education are mostly separate degree programs with separate coursework (Liu, 2012). Both special education and early childhood teacher education programs need to work together to better prepare preservice teachers to work with young children with and without disabilities. There may be a need for early childhood policy makers and professionals to develop effective plans for both preservice and inservice training to help current and future teachers acquire the necessary knowledge and skills to work with children with disabilities and their families.

Recommendations for Future Research

The present study is only the beginning of a comprehensive research agenda that is needed to understand and support Chinese preschool teachers' implementation of social, emotional, and behavioral teaching practices. A number of recommendations for future research are noted. First, there is a need for more comprehensive validity

studies of the SETP-C that use analytical procedures drawn from more advanced methodologies, such as multidimensional item response theory (MIRT) models. In the present study, factor analytic procedures were used to gather score validity evidence for the SETP-C. Although factor analysis and MIRT have virtually identical statistical formulations when applied to matrices of item responses, MIRT is different from factor analysis at (a) modeling the interaction between persons and items, (b) focusing on the differences in means and variances of the item scores, and (c) having item parameter estimates on common metrics (Reckase, 2009). Further, a short form of the SETP-C could be investigated to reduce response burden, given the current version of the SETP-C contained 70 teaching practice items being rated twice for frequency and confidence.

Due to limited resources, the present study relied exclusively on the use of a self-report measure completed by teachers. Previous research has documented the weak correlation between Chinese preschool teachers' self-reported and observed use of teaching practices (e.g., Hu, Chen, & Fan, 2017; Luo et al., 2017). Self-report and direct observation are two major techniques used to measure teachers' behaviors and both have their strengths and weakness (Hu et al., 2017; Prince, Adamo, Hamel, Hardt, Gorber, & Tremblay, 2008). A combination of self-report and direct observation may lead to more comprehensive and representative information about teachers' use of teaching practices in their classrooms and reveal correspondence or lack thereof between what teachers say they do and what they are observed doing.

The present study examined the effect of various teacher, classroom, and preschool characteristics on teachers' reported frequency of and confidence in use of

social, emotional, and behavioral teaching practices as measured by the SETP-C. Although a few noteworthy relationships were identified, interpretations related to these relationships were preliminary, given the limited research that has examined these variables in a sample of Chinese preschool teachers. Further, the analytic sample for the present study involved 1,599 teachers from 120 preschools located in Beijing and Ningbo, which is considered fairly large and representative of diverse preschools within these two cities. However, the extent to which the study sample was representative of the population of preschool teachers in mainland China remains somewhat uncertain. Considering the differences in economic development across different regions of mainland China, additional research that involves participants from more diverse economic, geographic, program, and educational backgrounds is needed to better understand the relationships revealed in the present study, and to explore the extent to which these relationships are replicated in future studies.

Future studies are needed to investigate the relationship between teachers' use of social, emotional, and behavioral teaching practices and child outcomes in the Chinese context. The present study did not examine child outcomes associated with teachers' implementation of social, emotional, and behavioral teaching practices. The primary focus of the present study was to characterize Chinese preschool teachers' reported frequency and confidence in implementing social, emotional, and behavioral teaching practices. Several other empirical studies have examined the relationship between preschool teachers' implementation of the *Pyramid Model* practices and young children's social and behavioral outcomes (e.g., Artman-Meeker & Hemmeter, 2012; Hemmeter et al., 2016), however, these studies were primarily conducted in the United

States. It would be important to study whether similar results would be found between Chinese preschool teachers' fidelity of implementation of practices and children's social, emotional, and behavioral learning outcomes.

A final recommendation for future research pertains to designing a culturally appropriate, multicomponent professional development intervention for supporting Chinese preschool teachers' use of social, emotional, and behavioral teaching practices. In tandem with the development and validation of the professional development intervention, the effect of a professional development intervention on teachers' implementation of teaching practices and children's social-emotional skills and challenging behavior should be examined. Such studies would contribute to an important line of worldwide research that provides empirical evidence about the effects of professional development interventions associated with the *Pyramid Model* on teacher practice and child outcomes in preschool settings.

Summary

In mainland China, there has been growing interest in promoting the social competence of young children, and the social domain has officially been identified as one of the five curricular domains in preschools nationwide since 2001 (Li & Feng, 2013). Little is known, however, about the specific teaching practices that Chinese preschool teachers are using to promote children's social-emotional competence and to prevent or address challenging behavior. A need existed to characterize and quantify the teaching practices that Chinese preschool teachers are using to promote the social, emotional, and behavioral development of young children (Jiang, 2015). The primary purpose of the present study was to examine the perspectives of a sample of Chinese preschool teachers from 120 randomly selected preschool programs in Beijing and

Ningbo about their social, emotional, and behavioral teaching practices using the SETP-C. The teaching practices on the SETP-C aligned with the *Pyramid Model* and two nationally recognized and influential Chinese early childhood learning standards documents. Before the collection of data for the present study, the SETP-C was developed and various sources of validity evidence were gathered using systematic and iterative quantitative and qualitative approaches, particularly through the cultural and practice lenses of Chinese early childhood researchers, leaders, practitioners, and master's students in preservice training programs. Beginning in 2013, the development and validation of the SETP-C consisted of four phases: item generation and selection, initial validation and item reduction, external expert review, and wording and translation.

The present study employed a cross-sectional, descriptive survey research design to explore and examine Chinese preschool teachers' frequency of use and confidence in implementing social, emotional, and behavioral teaching practices and relationships of frequency and confidence to various teacher, classroom, and preschool characteristics. In addition, the present study included a focus on identifying the types of supports Chinese preschool teachers reported were needed to better prepare them to implement preschool social education. The analytic sample for the present study involved 1,599 Chinese teachers from 120 preschools in Beijing and Ningbo.

Four confirmatory factor analytic models of the SETP-C were tested and compared to provide score validity evidence based on internal structure, and a seven-factor solution was ultimately chosen due to its conceptual and statistical soundness. The present study provides preliminary evidence that supports the multidimensionality of preschool social, emotional, and behavioral teaching practices as measured by the

SETP-C. Seven latent variables or domains of preschool social, emotional, and behavioral teaching practices were found: (a) Nurturing and Responsive Relationships, (b) Supportive Classroom Environment, (c) Social-Emotional Instructional Content, (d) Social-Emotional Instructional Strategies, (e) Responses to Challenging Behavior, (f) Interventions for Children with Persistent Challenging Behavior, and (g) Supporting Families Use of Social, Emotional, and Behavioral Teaching Practices. The adequacy of the internal consistency score reliability for each of the seven latent variables as measured by the Cronbach's alpha and omega coefficients was also supported in the present study.

Findings suggest preschool teachers in the present study were less likely to implement and were not well equipped to address the needs of children with persistent challenging behavior. Their ratings of frequency were significantly associated with their ratings of confidence across all latent variables. Generally, various teacher and classroom characteristics (e.g., teacher's role in the classroom, certification in early childhood education, years of teaching experience, social-emotional curriculum, child-to-teacher ratio, inclusion of children with disabilities, and child age in the classroom) were associated with Chinese teachers' reported frequency of use or confidence with implementing social, emotional, and behavioral teaching practices. Two primary requests in terms of needed types of supports were a specific social-emotional curriculum and family's support and cooperation. Several teacher, classroom, and preschool characteristics were also significantly associated with the types of supports requested by Chinese teachers.

The present study is one of a handful of empirical studies that have examined preschool teachers' self-reported implementation of social, emotional, and behavioral teaching practices associated with the *Pyramid Model*. It is the first of its kind to be conducted in the mainland China socio-cultural context. Despite the previously noted limitations, the present study provides important score validity and reliability evidence related to the internal structure of the SETP-C and useful information about the status of social, emotional, and behavioral teaching practices in preschool programs located in Beijing and Ningbo. As additional research is conducted to examine which teaching practices support young children's social, emotional, and behavioral development, measure like the SETP-C will be useful for research, program evaluation, and professional development. The practical and policy implications of findings from the present study were discussed, followed by recommendations for future research that could build upon the knowledge gained from the present study.

APPENDIX A
SEARCH STRATEGY IN PSYCINFO

1. TX program*
2. TX treatment*
3. TX intervent*
4. TX therap*
5. TX educat*
6. TX teach*
7. TX instruct*
8. TX train*
9. TX curricul*
10. DE intervention
11. DE education
12. DE teaching
13. DE training
14. DE curriculum
15. 1 OR 2 OR 3 OR 4 OR 5 OR 6 OR 7 OR 8 OR 9 OR 10 OR 11 OR 12 OR 13
OR 14
16. TX social*
17. TX "social skill*"
18. TX "social competenc*"
19. TX emotion*
20. TX "emotion* skill*"
21. TX "emotion* competenc*"
22. TX "social emotion*"
23. TX "social-emotion*"
24. TX "social and emotion*"
25. TX behavior*
26. MM "social skills"
27. DE behavior
28. 16 OR 17 OR 18 OR 19 OR 20 OR 21 OR 22 OR 23 OR 24 OR 25 OR 26 OR
27
29. 15 AND 28

30. TX “social develop*”
31. TX “social interaction*”
32. TX “social learn*”
33. TX “social skill*”
34. TX “social competenc*”
35. TX “social behavior*”
36. TX “social adjustment”
37. TX “emotion* develop*”
38. TX “emotion* learn*”
39. TX “emotion* control”
40. TX “emotion* regulation”
41. TX “emotion* competenc*”
42. TX “emotion* skill*”
43. TX “emotion* intelligence”
44. TX “emotion* literacy”
45. TX “emotion* adjustment”
46. TX “social-emotion* develop*”
47. TX “social-emotion* competenc*”
48. TX “social-emotion* skill*”
49. TX “social-emotion* learn*”
50. TX “social emotion* develop*”
51. TX “social emotion* competenc*”
52. TX “social emotion* skill*”
53. TX “social emotion* learn*”
54. TX “social and emotion* develop*”
55. TX “social and emotion* competenc*”
56. TX “social and emotion* skill*”
57. TX “social and emotion* learn*”
58. TX “challenging behavior*”
59. TX “problem behavior*”
60. TX “behavior* problem*”
61. TX “behavior* disorder*”
62. TX “problem solving”

63. DE "social interaction"
64. DE "social learning"
65. DE "social behavior"
66. MM "social skills"
67. MM "social adjustment"
68. MM "emotional development"
69. DE "emotional control"
70. MM "emotional regulation"
71. DE "emotional adjustment"
72. MM "emotional intelligence"
73. DE "problem solving"
74. DE "behavior problems"
75. DE "behavior disorders"
76. 30 OR 31 OR 32 OR 33 OR 34 OR 35 OR 36 OR 37 OR 38 OR 39 OR 40 OR 41 OR 42 OR 43 OR 44 OR 45 OR 46 OR 47 OR 48 OR 49 OR 50 OR 51 OR 52 OR 53 OR 54 OR 55 OR 56 OR 57 OR 58 OR 59 OR 60 OR 61 OR 62 OR 63 OR 64 OR 65 OR 66 OR 67 OR 68 OR 69 OR 70 OR 71 OR 72 OR 73 OR 74 OR 75
77. 29 AND 76
78. TX (infan* OR toddler* OR preschool* OR kindergarten* OR prekindergarten OR prek OR pre-k OR "young child*" OR daycare OR "day care" OR childcare OR "child care" OR "nursery school" OR "birth to 3" OR "birth to three" OR "early childhood" OR "birth to 6" OR "birth to six" OR "3 to 6" OR "three to six" OR "pre-primary" OR preprimary)
79. 77 AND 78
80. TX ("People's Republic of China" OR China OR Chinese OR Hongkong OR "Hong Kong" OR Macao OR Macanese OR Taiwan OR Taiwanese)
81. 79 AND 80
82. Limit 81 to Document Type: Journal Article

APPENDIX B
SOURCES OF SOCIAL, EMOTIONAL, AND BEHAVIORAL TEACHING PRACTICES INCLUDED ON THE
PRELIMIALRY DRAFT OF THE SETP-C

Domain	Item	TPOT-P	China's ELDG	China's <i>Guidance</i>	Systematic Review	Existing Instrument	Pilot Version
Teaching practices related to building nurturing and responsive relationships (12 items)	1. I join in children's play AND engage in conversations about their play at least twice a day.	✓	✓				
	2. I respond to children's ideas by asking questions AND making comments.	✓		✓*			
	3. I use descriptive praise with children.	✓	✓				✓
	4. I use alternative strategies to communicate with children who are language delayed.	✓		✓*			
	5. I have a plan for classroom activities AND know what I should be doing.	✓		✓			
	6. I coordinate daily schedules AND discuss roles/responsibilities with other staff members.	✓					
	7. I work with other staff members to take turn leading or co-leading activities.	✓					
	8. I work together to clean up or prepare activities with other staff members.	✓					
	9. I offer families ongoing opportunities to visit the classroom.	✓		✓*			✓
	10. I regularly provide families with information on what is occurring in the classroom.	✓		✓*			✓
	11. I use different methods of communication with different families to connect with all families.	✓					
	12. I establish bi-directional communication systems that offer families a way to share information about the family or child with me.	✓					✓
	13. I review the classroom schedule of daily activities with children AND refer to it throughout the day.	✓					✓
	14. I structure at least one small-group activity during a day.	✓		✓*			
	15. I prepare classroom activities before children arrive at the activity.	✓					
	16. I plan the daily schedule so children spend more time in child-directed activities than teacher-directed activities.	✓		✓*			

Domain	Item	TPOT-P	China's ELDG	China's Guidance	Systematic Review	Existing Instrument	Pilot Version
Teaching practices related to creating a high-quality supportive classroom environment (18 items)	17. I make learning centers with clear boundaries.	✓					
	18. I stop a teacher-directed activity when more than 25% of children lose interest.	✓		✓*			
	19. I provide whole-class notice about a transition at least 1 minute prior to the majority of transitions (≥75%) during a day.	✓					
	20. I use transition strategies (e.g., songs, games) to keep children actively engaged in the transitions.	✓					
	21. I describe what children should do during the transitions.	✓					
	22. I effectively guide individual children who need extra support during the transitions.	✓					
	23. I provide developmentally appropriate activities that will support the engagement of almost all of the class.	✓			✓*		
	24. I assist individual children in selecting activities AND becoming actively engaged.	✓					
	25. I use descriptive praise to children who are engaged in activities.	✓	✓				✓
	26. I provide children with multiple opportunities to make choices within activities.	✓	✓	✓			
	27. I use directions that tell children what to do rather than what not to do.	✓					✓
	28. I use descriptive praise to children who follow directions.	✓	✓				✓
	29. I check in with children to make sure they understand the directions.	✓					
	30. I individualize directions for children who need more support.	✓					
	31. I explicitly teach children classroom expectations or rules of behavior.	✓	✓	✓	✓	✓	✓
	32. I explicitly teach children friendship skills (e.g., helping, sharing, taking turns).	✓	✓	✓	✓	✓	✓
	33. I explicitly teach children social problem solving (e.g., resolve conflicts with peers).	✓	✓	✓*	✓		✓
	34. I explicitly teach children how to initiate AND respond to peers.	✓	✓*	✓*	✓		✓

Domain	Item	TPOT-P	China's ELDG	China's Guidance	Systematic Review	Existing Instrument	Pilot Version
Teaching practices related to instruction on targeted social or emotional skills (42 items)	35. I explicitly teach children how to initiate AND respond to adults.	✓	✓*	✓*	✓		✓
	36. I explicitly teach children how to develop autonomy AND independence.		✓	✓	✓	✓*	
	37. I explicitly teach children how to develop self-confidence AND self-esteem.		✓	✓	✓		
	38. I explicitly teach children strategies for joining in activities or participating with others.		✓	✓	✓		
	39. I explicitly teach children how to develop self-restraint/self-control.		✓		✓		
	40. I explicitly teach children how to show concern AND regard for others.		✓	✓*	✓		
	41. I explicitly teach children how to adjust themselves to group life.		✓	✓*	✓		
	42. I explicitly teach children how to develop a sense of belonging.		✓	✓	✓		
	43. I explicitly teach children basic knowledge about their social groups.		✓	✓	✓		
	44. I explicitly teach children about emotion vocabulary (e.g., happy, sad, proud).	✓			✓		✓
	45. I explicitly teach children how to recognize emotions in themselves or others.	✓	✓		✓		✓
	46. I explicitly teach children appropriate ways to express their emotions.	✓	✓		✓		✓
	47. I explicitly teach children how to respond to other children's emotions appropriately.	✓	✓		✓		✓
	48. I explicitly teach children how to understand the consequences of emotions.				✓		
	49. I explicitly teach children how to regulate their emotions.	✓	✓		✓		✓
	50. I explicitly teach children how to show empathy to others.		✓		✓		
51. I plan lessons to systematically teach children social-emotional competence.	✓	✓		✓	✓	✓	
52. I use naturally occurring opportunities to teach children social-emotional competence.	✓	✓	✓	✓	✓	✓	

Domain	Item	TPOT-P	China's ELDG	China's Guidance	Systematic Review	Existing Instrument	Pilot Version
Teaching practices related to instruction on targeted social or emotional skills (42 items)	53. I use eduplay to teach children social-emotional competence.		✓	✓	✓	✓	
	54. I embed social-emotional teaching into curricular domains other than social domain.				✓	✓	
	55. I post classroom expectations or rules of behavior by using visual representation.	✓					
	56. I review classroom expectations or rules of behavior with children.	✓					✓
	57. I intentionally structure activities or opportunities for children to work together.	✓	✓	✓	✓		✓
	58. I describe my observations of children in the classroom who demonstrated social-emotional competence.	✓					
	59. I model expected social-emotional competence while describing my behavior.	✓	✓	✓	✓		
	60. I help children reflect on their use of social-emotional competence.	✓	✓*				
	61. I individualize instruction of social-emotional competence based on children's developmental needs.	✓			✓		
	62. I use descriptive praise to children who are showing social-emotional competence.	✓	✓		✓	✓*	
	63. I facilitate discussions where children are involved in critically thinking about social-emotional competence AND its importance in the classroom.	✓	✓*			✓*	
	64. I provide children with planned opportunities to practice social-emotional competence.	✓	✓	✓	✓	✓	
	65. I provide individualized assistance to help children maintain interactions (multiple interaction exchanges) with their peers.	✓					
	66. I support children in helping their friends learn or practice social-emotional competence.	✓			✓		
	67. I validate children's emotions by helping children talk about their emotions.	✓	✓				
	68. I provide children with strategies to use when they are angry to calm down.	✓	✓				
69. I engage children in generating possible solutions to common classroom problems.	✓					✓	

Domain	Item	TPOT-P	China's ELDG	China's Guidance	Systematic Review	Existing Instrument	Pilot Version
	70. I use visuals (e.g., pictures, line drawings, photographs, magazine clippings) to teach children social-emotional competence.	✓					
	71. I have children to model expected social-emotional competence for their peers.	✓			✓		
	72. I use role-playing to teach children social-emotional competence.		✓		✓	✓	
Teaching practices related to addressing challenging behavior (11 items)	73. I identify the purpose(s) of children's challenging behavior (e.g., obtain attention or toys).	✓					
	74. I state the expected behavior or provide instruction in an acceptable alternative behavior when responding to challenging behavior.	✓					✓
	75. I remind children of behavior expectations or rules when challenging behavior occurs.	✓					
	76. I implement developmentally appropriate strategies (e.g., redirection, planned ignoring, taking a break from an activity) in response to challenging behavior.	✓					✓
	77. I provide positive attention or positive descriptive feedback to children when the children who exhibited challenging behavior begin behaving appropriately.	✓					
	78. I provide support to children who are angry or upset by assisting them with problem solving related to the challenging behavior.	✓					
	79. I refer children with persistent challenging behavior to a team or individual.	✓					
	80. I participate in the development of a behavior support plan by providing assessment data on children with persistent challenging behavior.	✓					
	81. I participate in the development of a behavior support plan by contributing ideas for strategies to be included on the plan for children with persistent challenging behavior.	✓					
	82. I implement or follow through with the individualized behavior support plan.	✓					✓
	83. I monitor child progress by collecting data on children's challenging behavior.	✓					

Domain	Item	TPOT-P	China's ELDG	China's Guidance	Systematic Review	Existing Instrument	Pilot Version
Teaching practices related to supporting family use (6 items)	84. I provide families with information on the importance of social-emotional development.	✓		✓*			✓
	85. I provide families with information on community resources related to children's social-emotional development or challenging behavior.	✓		✓*			
	86. I give families practical strategies that they can use during everyday activities to support their children's social-emotional development.	✓		✓*			
	87. I work with families to develop strategies that families can use at home to address challenging behavior.	✓					✓
	88. I work with families to collect information on the behavior of children to determine if there is a need for more intensive support or planning.	✓					
	89. I involve families in the process of developing a support plan for addressing challenging behavior at school.	✓					✓

Note: ✓ indicates an item that was directly drawn from a specific source; ✓* represents an item that was indirectly drawn from a specific source.

APPENDIX C
ENGLISH VERSION OF THE CONTENT VALIDATION RATING SCALE

Preschool Social, Emotional, and Behavioral Teaching Practices Rating Scale
[For Chinese preschool principals]

September, 2016

Hello!

My name is Li Luo. I am a doctoral student in early childhood special education at the University of Florida. I am inviting you to participate in a survey. The purpose of this survey is to understand Chinese preschool principals' perspectives about preschool social, emotional, and behavioral teaching practices. Principals play an important role in preschool curriculum decision-making and provide support and guidance to preschool teachers about their instruction and interactions with children. Your responses will offer information about the importance and cultural relevance of social, emotional, and behavioral teaching practices that preschool teachers might be using in everyday routines and activities.

This survey will take about 20 minutes to complete. If you choose to participate, your information will be kept both anonymous and confidential and your name will not appear anywhere on the survey.

If you choose to complete the survey, please answer each question and return the completed survey to me. Completion and return of the survey will indicate your consent to participate in this study.

Please feel free to ask me any questions about this study or need for any additional information. Thank you very much for helping with this study.

Sincerely,

Li Luo, M.Ed.
Anita Zucker Center for Excellence in Early Childhood Studies
University of Florida
Luoli@ufl.edu

Patricia Snyder, Ph.D.
Doctoral Advisor to Li Luo
Professor and David Lawrence Jr. Endowed Chair in Early Childhood Studies
Anita Zucker Center for Excellence in Early Childhood Studies
University of Florida
patriciasnyder@coe.ufl.edu

Eighty-nine teaching practices are listed below. These are practices that preschool teachers might use to support young children’s social, emotional, and behavioral development and learning. For each teaching practice listed below, there are two sections to which you should respond: (1) **how important** you believe the teaching practice is for Chinese preschool teachers to use in promoting the social, emotional, and behavioral development of young children, and (2) to what extent the teaching practice is **culturally relevant** for use in Chinese preschool classrooms.

Please read each teaching practice and think about your preschool during the past 6 months. Then, rate each teaching practice across two sections on a scale of 1 to 6 by placing a checkmark (✓) on the number that corresponds most with your belief. The **black** pies and texts in the table below illustrate what each number means across the two sections.

Rating	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
How Important	Not at all important	Slightly important	Somewhat important	Moderately important	Very important	Extremely important
How Cultural Relevant	Not at all relevant	Slightly relevant	Somewhat relevant	Moderately relevant	Very relevant	Extremely relevant

Teaching Practice	Section I <i>How important is this practice for Chinese preschool teachers to use?</i>	Section II <i>How culturally relevant is this practice for use in Chinese preschool classrooms?</i>
1. Teacher joins in children’s play AND engages in conversations about their play at least twice a day.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
2. Teacher responds to children’s ideas by asking questions AND making comments.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
3. Teacher uses descriptive praise with children.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
4. Teacher uses alternative strategies to communicate with children who are language delayed.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
5. Teacher has a plan for classroom activities AND knows what she/he should be doing.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
6. Teacher coordinates daily schedules AND discusses roles/responsibilities with other staff members.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
7. Teacher works with other staff members to take turns leading or co-leading activities.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
8. Teacher works together to clean up or prepare activities with other staff members.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
9. Teacher offers families ongoing opportunities to visit the classroom.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
10. Teacher regularly provides families with information on what is occurring in the classroom.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
11. Teacher uses different methods of communication with different families to connect with all families.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

Rating	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
How Important	Not at all important	Slightly important	Somewhat important	Moderately important	Very important	Extremely important
How Cultural Relevant	Not at all relevant	Slightly relevant	Somewhat relevant	Moderately relevant	Very relevant	Extremely relevant

Teaching Practice	Section I	Section II
	<i>How important is this practice for Chinese preschool teachers to use?</i>	<i>How culturally relevant is this practice for use in Chinese preschool classrooms?</i>
12. Teacher establishes bi-directional communication systems that offer families a way to share information about the family or child with the teacher.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
13. Teacher reviews the classroom schedule of daily activities with children AND refers to it throughout the day.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
14. Teacher structures at least one small-group activity during a day.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
15. Teacher prepares classroom activities before children arrive at the activity.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
16. Teacher plans the daily schedule so children spend more time in child-directed activities than teacher-directed activities.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
17. Teacher makes learning centers with clear boundaries.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
18. Teacher stops a teacher-directed activity when more than 25% of children lose interest.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
19. Teacher provides whole-class notice about a transition at least 1 minute prior to the majority of transitions (≥75%) during a day.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
20. Teacher uses transition strategies (e.g., songs, games) to keep children actively engaged in the transitions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
21. Teacher describes what children should do during the transitions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
22. Teacher effectively guides individual children who need extra support during the transitions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
23. Teacher provides developmentally appropriate activities that will support the engagement of almost all of the class.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
24. Teacher assists individual children in selecting activities AND becoming actively engaged.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
25. Teacher uses descriptive praise to children who are engaged in activities.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
26. Teacher provides children with multiple opportunities to make choices within activities.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
27. Teacher uses directions that tell children what to do rather than what not to do.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

Rating	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
How Important	Not at all important	Slightly important	Somewhat important	Moderately important	Very important	Extremely important
How Cultural Relevant	Not at all relevant	Slightly relevant	Somewhat relevant	Moderately relevant	Very relevant	Extremely relevant

Teaching Practice	Section I <i>How important is this practice for Chinese preschool teachers to use?</i>						Section II <i>How culturally relevant is this practice for use in Chinese preschool classrooms?</i>					
	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
28. Teacher uses descriptive praise to children who follow directions.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
29. Teacher checks in with children to make sure they understand the directions.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
30. Teacher individualizes directions for children who need more support.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
31. Teacher explicitly teaches children classroom expectations or rules of behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
32. Teacher explicitly teaches children friendship skills (e.g., helping, sharing, taking turns).	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
33. Teacher explicitly teaches children social problem solving (e.g., resolve conflicts with peers).	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
34. Teacher explicitly teaches children how to initiate AND respond to peers.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
35. Teacher explicitly teaches children how to initiate AND respond to adults.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
36. Teacher explicitly teaches children how to develop autonomy AND independence.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
37. Teacher explicitly teaches children how to develop self-confidence AND self-esteem.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
38. Teacher explicitly teaches children strategies for joining in activities or participating with others.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
39. Teacher explicitly teaches children how to develop self-restraint/self-control.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
40. Teacher explicitly teaches children how to show concern AND regard for others.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
41. Teacher explicitly teaches children how to adjust themselves to group life.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
42. Teacher explicitly teaches children how to develop a sense of belonging.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
43. Teacher explicitly teaches children basic knowledge about their social groups.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
44. Teacher explicitly teaches children about emotion vocabulary (e.g., happy, sad, proud).	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥

Rating	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
How Important	Not at all important	Slightly important	Somewhat important	Moderately important	Very important	Extremely important
How Cultural Relevant	Not at all relevant	Slightly relevant	Somewhat relevant	Moderately relevant	Very relevant	Extremely relevant

Teaching Practice	Section I <i>How important is this practice for Chinese preschool teachers to use?</i>						Section II <i>How culturally relevant is this practice for use in Chinese preschool classrooms?</i>					
	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
45. Teacher explicitly teaches children how to recognize emotions in themselves or others.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
46. Teacher explicitly teaches children appropriate ways to express their emotions.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
47. Teacher explicitly teaches children how to respond to other children's emotions appropriately.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
48. Teacher explicitly teaches children how to understand the consequences of emotions.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
49. Teacher explicitly teaches children how to regulate their emotions.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
50. Teacher explicitly teaches children how to show empathy to others.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
51. Teacher plans lessons to systematically teach children social-emotional competence.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
52. Teacher uses naturally occurring opportunities to teach children social-emotional competence.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
53. Teacher uses eduplay to teach children social-emotional competence.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
54. Teacher embeds social-emotional teaching into curricular domains other than social domain.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
55. Teacher posts classroom expectations or rules of behavior by using visual representation.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
56. Teacher reviews classroom expectations or rules of behavior with children.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
57. Teacher intentionally structures activities or opportunities for children to work together.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
58. Teacher describes her/his observations of children in the classroom who demonstrated social-emotional competence.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
59. Teacher models expected social-emotional competence while describing her/his behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
60. Teacher helps children reflect on their use of social-emotional competence.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
61. Teacher individualizes instruction of social-emotional competence based on children's developmental needs.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥

Rating	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
How Important	Not at all important	Slightly important	Somewhat important	Moderately important	Very important	Extremely important
How Cultural Relevant	Not at all relevant	Slightly relevant	Somewhat relevant	Moderately relevant	Very relevant	Extremely relevant

Teaching Practice	Section I	Section II
	<i>How important is this practice for Chinese preschool teachers to use?</i>	<i>How culturally relevant is this practice for use in Chinese preschool classrooms?</i>
62. Teacher uses descriptive praise to children who are showing social-emotional competence.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
63. Teacher facilitates discussions where children are involved in critically thinking about social-emotional competence AND its importance in the classroom.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
64. Teacher provides children with planned opportunities to practice social-emotional competence.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
65. Teacher provides individualized assistance to help children maintain interactions (multiple interaction exchanges) with their peers.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
66. Teacher supports children in helping their friends learn or practice social-emotional competence.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
67. Teacher validates children's emotions by helping children talk about their emotions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
68. Teacher provides children with strategies to use when they are angry to calm down.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
69. Teacher engages children in generating possible solutions to common classroom problems.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
70. Teacher uses visuals (e.g., pictures, line drawings, photographs, magazine clippings) to teach children social-emotional competence.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
71. Teacher has children to model expected social-emotional competence for their peers.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
72. Teacher uses role-playing to teach children social-emotional competence.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
73. Teacher identifies the purpose(s) of children's challenging behavior (e.g., obtain attention or toys).	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
74. Teacher states the expected behavior or provides instruction in an acceptable alternative behavior when responding to challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
75. Teacher reminds children of behavior expectations or rules when challenging behavior occurs.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
76. Teacher implements developmentally appropriate strategies (e.g., redirection, planned ignoring, taking a break from an activity) in response to challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

Rating	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
How Important	Not at all important	Slightly important	Somewhat important	Moderately important	Very important	Extremely important
How Cultural Relevant	Not at all relevant	Slightly relevant	Somewhat relevant	Moderately relevant	Very relevant	Extremely relevant

Teaching Practice	Section I <i>How important is this practice for Chinese preschool teachers to use?</i>						Section II <i>How culturally relevant is this practice for use in Chinese preschool classrooms?</i>					
	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
77. Teacher provides positive attention or positive descriptive feedback to children when the children who exhibited challenging behavior begin behaving appropriately.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
78. Teacher provides support to children who are angry or upset by assisting them with problem solving related to the challenging behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
79. Teacher refers children with persistent challenging behavior to a team or individual.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
80. Teacher participates in the development of a behavior support plan by providing assessment data on children with persistent challenging behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
81. Teacher participates in the development of a behavior support plan by contributing ideas for strategies to be included on the plan for children with persistent challenging behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
82. Teacher implements or follows through with the individualized behavior support plan.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
83. Teacher monitors child progress by collecting data on children's challenging behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
84. Teacher provides families with information on the importance of social-emotional development.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
85. Teacher provides families with information on community resources related to children's social-emotional development or challenging behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
86. Teacher gives families practical strategies that they can use during everyday activities to support their children's social-emotional development.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
87. Teacher works with families to develop strategies that families can use at home to address challenging behavior.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
88. Teacher works with families to collect information on the behavior of children to determine if there is a need for more intensive support or planning.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥
89. Teacher involves families in the process of developing a support plan for addressing challenging behavior at school.	①	②	③	④	⑤	⑥	①	②	③	④	⑤	⑥

Below are questions about you and your preschool. Please answer each question below. (Please do not include your name on any section of the survey)

1. In which province is your preschool located? _____
2. Where is your preschool located? Please check (✓) one.
 - Province-level city (Beijing, Tianjin, Shanghai, or Chongqing)
 - Provincial capital (e.g., Nanchang)
 - Prefecture-level city or autonomous prefecture (e.g., Fuzhou)
 - County-level city (e.g., Guangchang)
 - Town/village (e.g., Ganzhu)
 - Other (please specify) _____
3. What is the funding source for your preschool? Please check (✓) one.
 - Public
 - Private
 - Other (please specify) _____
4. What is your role in your preschool? Please check (✓) one.
 - Principal
 - Vice principal
 - Other (please specify) _____
5. What is the highest degree you have earned? Please check (✓) one.
 - High School or below
 - Normal school graduate
 - Associate's degree
 - Bachelor's degree
 - Master's degree
 - Doctoral degree
6. Is your degree in any of the following areas? Please check (✓) all that apply.
 - Early childhood education
 - Early childhood special education
 - Elementary education
 - Psychology
 - Management and leadership in education
 - Other (please specify) _____
7. How long have you been a preschool principal? _____ Year(s) _____ Month(s)
8. How long have you worked in preschool settings? _____ Year(s) _____ Month(s)
9. Does your preschool have a social-emotional curriculum? If yes, please specify the name of your social-emotional curriculum.
 - No
 - Yes (please specify) _____

Thank you for taking time to complete this survey. Your help in providing information about preschool social, emotional, and behavioral teaching practices is greatly appreciated. If there is anything else you would like to tell us about your experience in preschool social education, addressing challenging behavior of preschool children, and your feedback about this survey, please do so in the space provided below.

Please return your completed survey! Thank you again for your participation!

1. Your experience in preschool social education

2. Your perspectives about addressing challenging behavior of preschool children

3. Your feedback about this survey (e.g., overall quality of the survey, items need to be revised, or new items should be added)

APPENDIX D
CHINESE VERSION OF THE CONTENT VALIDATION RATING SCALE

幼儿园社会性、情绪和行为的教学实践调查问卷

[园长问卷]

2016年9月

尊敬的园长，您好！

我叫罗丽，是美国佛罗里达大学教育学院学前儿童特殊教育专业的一名在读博士生。诚挚邀请您参与一项问卷调查研究。本项问卷调查的目的在于了解中国幼儿园园长对于幼儿园社会性、情绪和行为的教学实践的看法。园长是幼儿园课程的主要决策者，同时在日常教学和师幼互动中给教师们提供帮助和指导。您的回馈与建议将为我们研究幼儿园教师实施的社会性、情绪和行为的教学实践的重要性和文化适宜性提供重要参考和宝贵信息。

本问卷为不记名调查，大约需要花 20 分钟完成。如果您选择参与本项调查研究，您在本问卷中提供的信息都会被严格保密，您的名字不会出现在问卷调查的任何地方。

请您回答问卷上的每一道题并把填写好的问卷交还给我。完成和提交本问卷就代表了您同意参与本项调查研究。

如果您对本研究有任何问题或者需要其他信息，请您随时提出。非常感谢您的支持！

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以下是 89 道题。每道题列出了一个幼儿园教师可能实施的旨在促进幼儿社会性、情绪和行为发展与学习的教学实践。每道题均分为**重要性**和**文化适宜性**两个部分。在“重要性”一栏，请您回答中国幼儿园教师实施这个教学实践在促进幼儿社会性、情绪和行为发展与学习上的**重要程度**；在“文化适宜性”一栏，请您回答这个教学实践在中国本土幼儿园实施的**文化适宜程度**。

本问卷采用六点量表。请您仔细阅读每一道题并根据您所在幼儿园过去半年的实际情况，从①到⑥中勾选(✓)一个你最认同的选项。下表中的**黑色**饼图和文字分别解释了两个部分中每个量表数字所代表的含义。

评分	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
重要性程度	不重要	有点重要	一般重要	比较重要	非常重要	极其重要
文化适宜性程度	不适宜	有点适宜	一般适宜	比较适宜	非常适宜	极其适宜

教育实践	重要性	文化适宜性
	(指在促进幼儿社会性情绪和行为发展上的重要程度)	(指在中国本土幼儿园实施的文化适宜程度)
1. 教师每日至少两次加入到幼儿的游戏中并且与幼儿交谈他们正在进行的游戏	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
2. 教师通过提问和评论，对幼儿的想法做出回应	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
3. 教师表扬幼儿时，采用描述性语言	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
4. 教师采用不同的方式跟语言发展迟缓的幼儿交流	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
5. 教师对班级活动进行规划，并且知道自己应当做什么	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
6. 教师与班里的其他教职工共同协调一日活动的计划并且讨论各自在活动中的角色/职责	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
7. 教师与班里的其他教职工轮流组织或者共同组织教育活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
8. 教师与班里的其他教职工共同打扫卫生或者一起准备活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
9. 教师持续地给家长提供参观班级的机会	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
10. 教师定期告知家长班级里所发生的事情	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
11. 教师采用不同的沟通方式与不同的家长进行联系，以便能够与所有的幼儿家庭建立联系	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
12. 教师建立家园双向沟通体系使得家长能够跟教师分享家庭或者幼儿的信息	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
13. 教师与幼儿一起浏览班级一日活动的流程并且全天都会对幼儿提及这个一日活动的流程	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
14. 教师每日至少组织一次小组活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
15. 教师在幼儿到来之前准备好班级活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
16. 教师对一日活动进行计划，使得幼儿可以花更多的时间在自己主导的活动中，而不是教师主导的活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
17. 教师为区角活动 / 区域活动划定清晰的边界	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

评分	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
重要性程度	不重要	有点重要	一般重要	比较重要	非常重要	极其重要
文化适宜性程度	不适宜	有点适宜	一般适宜	比较适宜	非常适宜	极其适宜
教育实践		重要性 (指在促进幼儿社会性情绪和行为发展上的重要程度)			文化适宜性 (指在中国本土幼儿园实施的文化适宜程度)	
18. 当全班超过四分之一的幼儿对教师主导的某个教育活动失去兴趣时, 教师停止该活动	①	②	③	④	⑤	⑥
19. 在每天超过四分之三的过渡环节中, 教师至少提前一分钟示全班幼儿即将到来的过渡环节	①	②	③	④	⑤	⑥
20. 教师采用过渡策略(如唱歌、游戏)以确保幼儿积极投入到过渡环节中	①	②	③	④	⑤	⑥
21. 教师向幼儿描述在过渡环节中他们应该做什么	①	②	③	④	⑤	⑥
22. 教师在过渡环节中有效地指导需要额外帮助的幼儿	①	②	③	④	⑤	⑥
23. 教师给幼儿提供适宜的教育活动, 让几乎全班的幼儿都能够投入到活动中	①	②	③	④	⑤	⑥
24. 教师在幼儿选择活动时给予个别化协助, 使这些幼儿能够主动参与到活动中来	①	②	③	④	⑤	⑥
25. 教师对积极参与到活动中的幼儿给予描述性表扬	①	②	③	④	⑤	⑥
26. 教师在活动中多次给幼儿提供选择的机会	①	②	③	④	⑤	⑥
27. 教师告诉幼儿应该干什么, 而非不应该干什么	①	②	③	④	⑤	⑥
28. 教师对遵从指令的幼儿给予描述性表扬	①	②	③	④	⑤	⑥
29. 教师向幼儿确认他们理解了教师发出的指令	①	②	③	④	⑤	⑥
30. 教师给需要额外帮助的幼儿发出个别化的指令	①	②	③	④	⑤	⑥
31. 教师明确详细地教导幼儿班级里的行为期望或者行为规则。	①	②	③	④	⑤	⑥
32. 教师明确详细地教导幼儿交朋友(如帮助、分享、轮流)	①	②	③	④	⑤	⑥
33. 教师明确详细地教导幼儿解决社会交往问题(如处理同伴冲突)	①	②	③	④	⑤	⑥
34. 教师明确详细地教导幼儿如何向同伴发起交往以及回应同伴发起的交往	①	②	③	④	⑤	⑥
35. 教师明确详细地教导幼儿如何向成人发起交往以及回应成人发起的交往	①	②	③	④	⑤	⑥
36. 教师明确详细地教导幼儿独立自主	①	②	③	④	⑤	⑥
37. 教师明确详细地教导幼儿自尊自信	①	②	③	④	⑤	⑥
38. 教师明确详细地教导幼儿加入到活动或者同伴中的策略	①	②	③	④	⑤	⑥

评分	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
重要性程度	不重要	有点重要	一般重要	比较重要	非常重要	极其重要
文化适宜性程度	不适宜	有点适宜	一般适宜	比较适宜	非常适宜	极其适宜
教育实践			重要性 (指在促进幼儿社会性情绪和行为发展上的重要程度)		文化适宜性 (指在中国本土幼儿园实施的文化适宜程度)	
39. 教师明确详细地教导幼儿自制自控	①	②	③	④	⑤	⑥
40. 教师明确详细地教导幼儿关心和尊重他人	①	②	③	④	⑤	⑥
41. 教师明确详细地教导幼儿如何适应集体生活	①	②	③	④	⑤	⑥
42. 教师明确详细地教导幼儿产生归属感	①	②	③	④	⑤	⑥
43. 教师明确详细地教授幼儿关于他们所属的社会群体的基本知识	①	②	③	④	⑤	⑥
44. 教师明确详细地教授幼儿关于情绪情感的词汇(如高兴、难过、自豪)	①	②	③	④	⑤	⑥
45. 教师明确详细地教导幼儿识别自己或者他人的情绪情感	①	②	③	④	⑤	⑥
46. 教师明确详细地教导幼儿以适当的方式表达自己的情绪情感	①	②	③	④	⑤	⑥
47. 教师明确详细地教导幼儿以适当的方式回应同伴的情绪情感	①	②	③	④	⑤	⑥
48. 教师明确详细地教导幼儿理解情绪情感所产生的后果	①	②	③	④	⑤	⑥
49. 教师明确详细地教导幼儿如何调节自己的情绪情感	①	②	③	④	⑤	⑥
50. 教师明确详细地教导幼儿要有同理心	①	②	③	④	⑤	⑥
51. 教师对课程进行专门规划, 系统性培养幼儿的社会性情绪能力	①	②	③	④	⑤	⑥
52. 教师采用随机教育的方式培养幼儿的社会性情绪能力	①	②	③	④	⑤	⑥
53. 教师在游戏中培养幼儿的社会性情绪能力	①	②	③	④	⑤	⑥
54. 教师在其他领域的活动中渗透社会性情绪教育	①	②	③	④	⑤	⑥
55. 教师在教室里张贴有关班级行为期望或者行为规则的墙报板贴(或其它可视化方式)	①	②	③	④	⑤	⑥
56. 教师向幼儿回顾班级里的行为期望或者行为规则	①	②	③	④	⑤	⑥
57. 教师有意识地组织活动或者创造机会让幼儿一起活动	①	②	③	④	⑤	⑥
58. 教师向幼儿描述自己所观察到的幼儿在教室里展示出的社会性情绪能力	①	②	③	④	⑤	⑥
59. 教师在向幼儿示范期望的社会性情绪能力时用语言描述自己的行为	①	②	③	④	⑤	⑥
60. 教师帮助幼儿思考幼儿自己对社会性情绪能力的应用	①	②	③	④	⑤	⑥

评分	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
重要性程度	不重要	有点重要	一般重要	比较重要	非常重要	极其重要
文化适宜性程度	不适宜	有点适宜	一般适宜	比较适宜	非常适宜	极其适宜
教育实践			重要性 (指在促进幼儿社会性情绪和行为发展上的重要程度)		文化适宜性 (指在中国本土幼儿园实施的文化适宜程度)	
			61. 教师根据幼儿发展的需要对幼儿进行个别化社会性情绪教育	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥	
62. 教师对表现出社会性情绪能力的幼儿给予描述性表扬	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
63. 教师帮助幼儿批判性地思考社会性情绪能力, 并且促进幼儿讨论社会性情绪能力在班级里的重要性	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
64. 教师事先做好规划, 给幼儿提供练习社会性情绪能力的机会	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
65. 教师提供个别化辅助以帮助幼儿维持与同伴的交往	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
66. 教师支持幼儿去帮助他们的小伙伴学习或练习社会性情绪能力	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
67. 教师通过引导幼儿谈论自己的情绪情感来确认幼儿的情绪情感状况	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
68. 教师给处于愤怒情绪中的幼儿提供策略让他们冷静下来	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
69. 教师让幼儿对班级里常见的问题提出可能的解决策略	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
70. 教师采用可视化的方式(如使用图片、线条画、照片、杂志剪报)教授幼儿社会性情绪能力	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
71. 教师让幼儿给同伴示范期望的社会性情绪能力	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
72. 教师利用角色扮演来教授幼儿社会情绪能力	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
73. 教师能识别幼儿问题行为的目的(如为了获得关注或玩具)	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
74. 当幼儿发生问题行为时, 教师向幼儿描述他们应该做什么或者教授幼儿正确的做法	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
75. 当幼儿发生问题行为时, 教师提醒他们要遵守班级里的行为期望或者行为规则	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
76. 教师采用发展适宜的策略(如重新给予幼儿指导、有计划地忽视、让幼儿暂停活动)来应对幼儿的问题行为	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
77. 当幼儿不再发生问题行为并开始表现良好时, 教师给予积极关注或者描述性地表扬幼儿	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
78. 当幼儿因问题行为而生气或者难过时, 教师给幼儿提供策略以帮助他们化解问题行为	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
79. 当幼儿出现持续性的问题行为时, 教师向相对专业的机构或者个人寻求帮助	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				

评分	1 = 	2 = 	3 = 	4 = 	5 = 	6 = 
重要性程度	不重要	有点重要	一般重要	比较重要	非常重要	极其重要
文化适宜性程度	不适宜	有点适宜	一般适宜	比较适宜	非常适宜	极其适宜
教育实践			重要性 (指在促进幼儿社会性情绪和行为发展上的重要程度)		文化适宜性 (指在中国本土幼儿园实施的文化适宜程度)	
			80. 教师支持专业机构或个人为持续出现问题行为的幼儿制定行为干预方案, 并向其提供该幼儿问题行为的相关测评数据	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥	
81. 教师支持专业机构或个人为持续出现问题行为的幼儿制定行为干预方案, 并通过向其提供解决幼儿问题行为的策略建议参与到行为干预方案的制定中	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
82. 教师对有持续性问题行为的幼儿实施个别化的行为干预方案	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
83. 教师通过收集关于幼儿问题行为的数据来监控幼儿的进步状况	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
84. 教师帮助家长了解培养幼儿社会性情绪能力的重要意义	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
85. 教师帮助家长了解有关幼儿社会性情绪发展或者问题行为的社区资源	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
86. 教师给家长提供可以在日常生活中使用的旨在促进幼儿社会性情绪发展的实用策略	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
87. 教师与幼儿家长一起制定能够在家庭中使用的解决幼儿问题行为的策略	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
88. 教师与幼儿家长一起收集关于幼儿行为的信息以便判断是否需要对幼儿开展更有强度的干预方案	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				
89. 教师让幼儿家长参与到解决幼儿在园问题行为的干预方案的制定中	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥				

下面我们想了解一下关于您和您所在的幼儿园的基本信息。请您回答以下几个问题。(您的名字不会出现在问卷上)

1. 您所在的幼儿园位于中国哪个省份呢? _____
2. 您所在的幼儿园坐落于以下哪个行政区域呢? 请在符合的选项上打勾 (✓)。
 - 直辖市(包括北京、天津、上海、和重庆)
 - 省会城市
 - 地级市或自治州
 - 县或自治县
 - 乡镇
 - 其他(请具体填写) _____
3. 您所在的幼儿园是? 请在符合的选项上打勾 (✓)。
 - 公立幼儿园
 - 私立幼儿园
 - 其他(请具体填写) _____
4. 您在幼儿园的职务是什么? 请在符合的选项上打勾 (✓)。
 - 园长
 - 副园长
 - 其他(请具体填写) _____
5. 您获得的最高学历是? 请在符合的选项上打勾 (✓)。
 - 高中或以下
 - 中专 / 中师
 - 大专
 - 本科
 - 硕士
 - 博士
6. 您所学的专业是什么 (包括您的所有学历)? 请在所有符合的选项上打勾(✓)。
 - 学前教育
 - 学前特殊教育
 - 小学教育
 - 心理学
 - 教育管理
 - 其他(请具体填写) _____
7. 您担任园长多长时间了? _____年_____月
8. 您在幼儿园工作多长时间? _____年_____月
9. 您所在的幼儿园是否开设了社会性情绪课程? 如果有, 请您填写所用的社会性情绪课程的名称。
 - 没有
 - 有(请填写课程名称) _____

非常感谢您抽空参与本项问卷调查。如果您有关于幼儿园社会领域教育、应对幼儿的问题行为，以及对本问卷的任何建议，请您在下面的空白处告诉我们。

1. 您关于幼儿园社会领域教育的体会

2. 您关于应对幼儿问题行为的看法

3. 您对本问卷的意见，例如问卷的整体质量、需要修改的问卷题项、可以增加的问卷题项等

APPENDIX E ENGLISH VERSION OF THE CONTENT VALIDATION INTERVIEW PROTOCOL

Content Validation Interviews with Chinese Early Childhood Faculty

Part 1. Conceptual Basis of the SETP-C

Instruction: The primary construct of interest on the SETP-C is social, emotional, and behavioral teaching practices appropriate for use in preschool classrooms. The SETP-C is designed to be completed by Chinese preschool teachers working in public and private preschool programs in mainland China and in preschool programs with varying levels of quality. When completing the SETP-C, teachers provide information about the importance of the teaching practices, their use of the teaching practices in their classrooms, and their confidence in implementing the practices. There are five hypothesized domains of preschool social, emotional, and behavioral teaching practices based on the *Pyramid Model* (Hemmeter, Fox, & Snyder, 2014), China's Early Learning and Development Guidelines for Children 3-6 Years Old (ELDG), and Chinese research literature: (1) teaching practices related to building nurturing and responsive relationships, (2) teaching practices related to creating a high-quality supportive classroom environment, (3) teaching practices related to instruction on targeted social or emotional skills, (4) teaching practices related to addressing challenging behavior, and (5) teaching practices related to supporting family use of social, emotional, and behavioral teaching practices.

Question 1: Does our conceptualization of social, emotional, and behavioral teaching practices based on the *Pyramid Model* (Hemmeter, Fox, & Snyder, 2014), China's ELDG, and Chinese research literature make sense to you?

Question 2: Are there any domains that we have missed?

Question 3: Are there any domains included in our conceptualization that are not relevant in Chinese preschool contexts?

Question 4: The SETP-C will be used in preschool programs with varying levels of quality and preschool programs with different funding sources. Is our conceptualization of social, emotional, and behavioral teaching practices relevant for these different types of preschool programs? Do you think our conceptualization is appropriate for each of these different preschool programs?

Part 2. Item-Matching Task

Instruction: Please read each item listed below. For each item, use the scale below to identify (a) which one of the five domains is **clearly measured** by the item by putting a “1” in the appropriate column and (b) which domain the item is clearly **not measuring** by putting a “-1” in the appropriate column. If it is **unclear** which domain the item is measuring, put a “0” in the column.

1 = clearly measuring, -1 = clearly not measuring, 0 = unclear

For example:

Item	Domain				
	Nurturing and responsive relationships	High-quality supportive classroom environment	Instruction on targeted social or emotional skills	Addressing challenging behavior	Supporting family use of social, emotional, and behavioral teaching practices
Teacher offers families ongoing opportunities to visit the classroom.	1	-1	-1	-1	-1

Item	Domain				
	Nurturing and responsive relationships	High-quality supportive classroom environment	Instruction on targeted social or emotional skills	Addressing challenging behavior	Supporting family use of social, emotional, and behavioral teaching practices
Teacher joins in children’s play AND engages in conversations about their play.					
Teacher responds to children’s ideas by asking questions AND making comments.					
Teacher uses alternative strategies to communicate with children who are language delayed.					
Teacher has a plan for classroom activities AND knows what she/he should be doing.					
Teacher coordinates daily schedules AND discusses roles/responsibilities with other staff members.					
Teacher works with other staff members to take turns leading or co-leading activities.					
Teacher works with other staff members to clean up or prepare activities.					
Teacher regularly provides families with information on what is occurring in the classroom.					

1 = clearly measuring, -1 = clearly not measuring, 0 = unclear

Item	Domain				
	Nurturing and responsive relationships	High-quality supportive classroom environment	Instruction on targeted social or emotional skills	Addressing challenging behavior	Supporting family use of social, emotional, and behavioral teaching practices
Teacher uses different methods of communication with different families to connect with all families.					
Teacher establishes bi-directional communication systems that offer families a way to share information about the family or child with the teacher.					
Teacher structures at least one small-group activity during a day.					
Teacher prepares classroom activities before children arrive at the activity.					
Teacher plans the daily schedule so children spend more time in child-directed activities than teacher-directed activities.					
Teacher uses transition strategies (e.g., songs, games) to keep children actively engaged in the transitions.					
Teacher effectively guides individual children who need extra support during the transitions.					
Teacher provides developmentally appropriate activities that will support the engagement of almost all of the class.					
Teacher assists individual children in selecting activities AND becoming actively engaged.					
Teacher provides children with multiple opportunities to make choices within activities.					
Teacher uses directions that tell children what to do rather than what not to do.					
Teacher checks in with children to make sure they understand the directions.					
Teacher individualizes directions for children who need more support.					
Teacher explicitly teaches children classroom expectations or rules of behavior.					
Teacher explicitly teaches children friendship skills (e.g., helping, sharing, taking turns).					

1 = clearly measuring, -1 = clearly not measuring, 0 = unclear

Item	Domain				
	Nurturing and responsive relationships	High-quality supportive classroom environment	Instruction on targeted social or emotional skills	Addressing challenging behavior	Supporting family use of social, emotional, and behavioral teaching practices
Teacher explicitly teaches children social problem solving (e.g., resolve conflicts with peers).					
Teacher explicitly teaches children how to initiate AND respond to peers.					
Teacher explicitly teaches children how to develop autonomy AND independence.					
Teacher explicitly teaches children how to develop self-confidence AND self-esteem.					
Teacher explicitly teaches children how to develop self-restraint/self-control.					
Teacher explicitly teaches children how to show concern AND regard for others.					
Teacher explicitly teaches children about emotion vocabulary (e.g., happy, sad, proud).					
Teacher explicitly teaches children how to participate as part of a social group.					
Teacher explicitly teaches children how to recognize emotions in themselves or others.					
Teacher explicitly teaches children appropriate ways to express their emotions.					
Teacher explicitly teaches children how to regulate their emotions.					
Teacher explicitly teaches children how to show empathy to others.					
Teacher reviews posted classroom expectations or rules of behavior with children.					
Teacher describes her/his observations of children in the classroom who demonstrated positive social or emotional skills.					
Teacher models expected positive social or emotional skills while describing her/his behavior.					
Teacher individualizes instruction of positive social or emotional skills based on children's developmental needs.					

1 = clearly measuring, -1 = clearly not measuring, 0 = unclear

Item	Domain				
	Nurturing and responsive relationships	High-quality supportive classroom environment	Instruction on targeted social or emotional skills	Addressing challenging behavior	Supporting family use of social, emotional, and behavioral teaching practices
Teacher uses descriptive praise when children engage in positive social or emotional skills.					
Teacher provides children with planned activities or opportunities to practice positive social or emotional skills.					
Teacher provides individualized assistance to help children maintain interactions (multiple interaction exchanges) with their peers.					
Teacher uses peer-mediated strategies to support peers to learn AND practice pro-social behaviors for use with their classmates who have social skills delays.					
Teacher validates children's emotions by helping children talk about their emotions.					
Teacher provides children with strategies to use when they are angry to calm down.					
Teacher engages children in generating possible solutions to common classroom social or emotional problems.					
Teacher uses visuals (e.g., pictures, line drawings, photographs, magazine clippings) to teach children positive social or emotional skills.					
Teacher uses role-playing to teach children positive social or emotional skills.					
Teacher plans lessons to systematically teach children positive social or emotional skills.					
Teacher uses routines to teach children positive social or emotional skills.					
Teacher uses eduplay to teach children positive social or emotional skills.					
Teacher embeds instruction of positive social or emotional skills into curricular domains other than social domain.					
Teacher identifies the purpose(s) of children's challenging behavior (e.g., obtain attention or toys).					
Teacher states the expected behavior or provides instruction on an acceptable alternative behavior when responding to challenging behavior.					

1 = clearly measuring, -1 = clearly not measuring, 0 = unclear

Item	Domain				
	Nurturing and responsive relationships	High-quality supportive classroom environment	Instruction on targeted social or emotional skills	Addressing challenging behavior	Supporting family use of social, emotional, and behavioral teaching practices
Teacher implements developmentally appropriate strategies (e.g., redirection, planned ignoring, taking a break from an activity) in response to challenging behavior.					
Teacher provides positive attention or descriptive praise when children who exhibit challenging behavior begin behaving appropriately.					
Teacher refers children with persistent challenging behavior to a team or individual with expertise related to challenging behavior.					
Teacher participates in the development of a written plan to address children's challenging behavior by providing assessment data.					
Teacher contributes ideas for strategies to be included on the written plan to address children's challenging behavior					
Teacher implements or follows through with the written plan to address children's challenging behavior					
Teacher monitors children's progress on the written plan by collecting data related to their challenging behavior.					
Teacher provides families with information on the importance of social-emotional development.					
Teacher provides families with information on community resources related to children's social-emotional development or challenging behavior.					
Teacher gives families practical strategies that they can use during everyday activities to support their children's social-emotional development.					
Teacher works with families to develop strategies that families can use at home to address challenging behavior.					
Teacher works with families to collect information on the behavior of children to determine if there is a need for more intensive support or a written plan to address children's challenging behavior.					
Teacher involves families in the process of developing a written plan for addressing children's challenging behavior at school.					

Part 3. The Use of the SETP-C scores

Instruction: Information gathered from the SETP-C is intended to help inform decisions about professional development or preservice training for Chinese preschool teachers focused on preschool children’s social, emotional, and behavioral competence. Given the SETP-C only assesses some aspects of teacher-child interactions with focus on preschool children’s social, emotional, and behavioral competence, it is worth noting that teachers’ scores on the SETP-C are not intended to be used for performance evaluation or the awarding of a teaching credential.

Question 1: What are your opinions about the intended use of SETP-C scores?

Question 2: How useful would SETP-C information be for informing decisions about professional development or preservice training for Chinese preschool teachers?

Question 3: Are there any unintended effects you can identify of using SETP-C scores?

APPENDIX F
CHINESE VERSION OF THE CONTENT VALIDATION INTERVIEW PROTOCOL

《中国幼儿园教育金字塔问卷》的内容效度调查

第一部分：《中国幼儿园教育金字塔问卷》中的维度

指导语：《中国幼儿园教育金字塔问卷》中的核心概念是幼儿园社会性、情绪和行为教育。《中国幼儿园教育金字塔问卷》是由中国幼儿园教师填写，这些教师可能来自于公办幼儿园，也可能来自于民办幼儿园。这些教师或许还来自于不同质量评级的幼儿园。幼儿园教师填写《中国幼儿园教育金字塔问卷》能够给我们提供以下信息：她们关于具体教育实践重要性的认知、她们实施具体教育实践的频率、以及她们在开展具体教育实践时的胜任力。基于对美国金字塔模型 (Pyramid Model)、中国《3-6 岁儿童学习与发展指南》和相关文献综述的分析，我们在该问卷中假设幼儿园社会性、情绪和行为教育有五个维度，分别是：（1）建立养育性和回应性的关系；（2）创设高质量、支持性的环境；（3）有针对性的社会性和情绪教学；（4）应对儿童的问题行为；和（5）支持家长使用金字塔模型教育实践。

问题一：您觉得我们这五个维度的划分是否合理呢？

问题二：您觉得我们有没有遗漏哪个维度呢？

问题三：我们假设的五个维度有没有哪个不适宜中国幼儿园的文化背景呢？

问题四：《中国幼儿园教育金字塔问卷》的目标对象可能来自不同质量评级的幼儿园、公办幼儿园或者民办幼儿园。您觉得我们假设的这五个维度是否适用于这些不同类型的幼儿园里的教师呢？是否适用于每一类幼儿园的教师呢？

第二部分：《中国幼儿园教育金字塔问卷》中的题项和维度匹配

指导语：以下是问卷第一分量表中的 67 道题项。请您仔细阅读每一道题，然后判断每道题具体测量五个假设维度的哪一个维度。“1”表示明确测量某维度，“-1”表示明确不测量某维度，“0”表示不清楚是否测量某维度。

示范：

题项	五个维度				
	建立养育性和回应性的关系	创设高质量、支持性的环境	有针对性的社会性和情绪教学	应对儿童的问题行为	支持家长使用金字塔模型教育实践
教师持续地给家长提供参观班级的机会	1	-1	-1	-1	-1

以下请您填写：

题项	五个维度				
	建立养育性和回应性的关系	创设高质量、支持性的环境	有针对性的社会性和情绪教学	应对儿童的问题行为	支持家长使用金字塔模型教育实践
1. 教师在活动中多次给幼儿提供选择的机会					
2. 教师明确详细地教授幼儿解决社会交往问题(如处理同伴冲突)					
3. 教师采用不同的沟通方式与不同的家长进行联系，以便能够与所有的幼儿家庭建立联系					
4. 教师明确详细地教授幼儿关于情绪情感的词汇(如高兴、难过、自豪)					
5. 教师在向幼儿示范期望的社会性情绪能力时用语言描述自己的行为					
6. 教师让幼儿对班级里常见的问题提出可能的解决策略					
7. 当幼儿发生问题行为时，教师提醒他们要遵守班级里的行为期望或者行为规则					
8. 当幼儿出现持续性的问题行为时，教师向相对专业的机构或者专业人士寻求帮助					
9. 教师帮助家长了解培养幼儿社会性情绪能力的重要意义					

“1”表示明确测量某维度，“-1”表示明确不测量某维度，“0”表示不清楚是否测量某维度

题项	五个维度				
	建立养育性和回应性的关系	创设高质量、支持性的环境	有针对性的社会性和情绪教学	应对儿童的问题行为	支持家长使用金字塔模型教育实践
10. 教师让幼儿家长参与到解决幼儿在园问题行为的干预方案的制定中					
11. 教师加入到幼儿的游戏中并且与幼儿交谈他们正在进行的游戏					
12. 教师与班里的其他教职工共同打扫卫生或者一起准备活动					
13. 教师对一日活动进行计划，使幼儿可以花更多的时间在自己主导的活动而非教师主导的活动					
14. 教师给需要额外帮助的幼儿发出个别化的指令					
15. 教师明确详细地教授幼儿要自尊自信					
16. 教师明确详细地教授幼儿如何调节自己的情绪情感					
17. 教师提供个别化支持以帮助幼儿维持与同伴的交往					
18. 教师专门组织教育活动来系统性地培养幼儿的社会性情绪能力					
19. 教师支持专业机构或专业个人为持续出现问题行为的幼儿制定行为干预方案，并通过向其提供解决幼儿问题行为的策略参与到行为干预方案的制定中					
20. 教师给家长提供可以在日常生活中使用的旨在促进幼儿社会性情绪发展的实用策略					
21. 教师在游戏中培养幼儿的社会性情绪能力					
22. 教师明确详细地教授幼儿要有同理心					
23. 教师明确详细地教授幼儿要独立自主					
24. 教师采用发展适宜的策略(如重新给予幼儿指导、有计划地忽视、让幼儿暂停活动等)来应对幼儿的问题行为					

“1”表示明确测量某维度，“-1”表示明确不测量某维度，“0”表示不清楚是否测量某维度					
题项	五个维度				
	建立养育性和回应性的关系	创设高质量、支持性的环境	有针对性的社会性和情绪教学	应对儿童的问题行为	支持家长使用金字塔模型教育实践
25. 教师利用角色扮演来教授幼儿社会情绪能力					
26. 教师在其他领域的活动中渗透社会性情绪教育					
27. 教师向幼儿回顾班级里张贴的行为期望或者行为规则					
28. 教师每日至少组织一次小组活动					
29. 教师采用不同的方式跟语言发展迟缓的幼儿交流					
30. 教师在幼儿选择活动时给予个别化协助，使这些幼儿能够主动参与到活动中来					
31. 教师在过渡环节中有效地指导需要额外帮助的幼儿					
32. 教师明确详细地教授幼儿班级里的行为期望或者行为规则					
33. 教师明确详细地教授幼儿如何识别自己或者他人的情绪情感					
34. 教师对表现出社会性情绪能力的幼儿给予描述性表扬					
35. 教师通过引导幼儿谈论自己的情绪情感来确认幼儿的情绪情感状况					
36. 当幼儿不再发生问题行为并开始表现良好时，教师给予幼儿积极关注或者描述性地表扬幼儿					
37. 教师告诉幼儿应该干什么，而非不应该干什么					
38. 教师明确详细地教授幼儿如何向同伴发起交往以及回应同伴发起的交往					
39. 教师明确详细地教授幼儿如何以适当的方式表达自己的情绪情感					

“1”表示明确测量某维度，“-1”表示明确不测量某维度，“0”表示不清楚是否测量某维度					
题项	五个维度				
	建立养育性和回应性的关系	创设高质量、支持性的环境	有针对性的社会性和情绪教学	应对儿童的问题行为	支持家长使用金字塔模型教育实践
40. 教师根据幼儿发展的需要对幼儿进行个别化的社会性情绪教育					
41. 教师给处于愤怒情绪中的幼儿提供策略让他们冷静下来					
42. 教师采用随机教育的方式培养幼儿的社会性情绪能力					
43. 教师通过收集关于幼儿问题行为的数据来监控幼儿的进步状况					
44. 教师与幼儿家长一起收集关于幼儿行为的信息以判断是否需要对幼儿开展更有强度的干预方案					
45. 教师通过提问和评论，对幼儿的想法做出回应					
46. 教师定期告知家长班级里所发生的事情					
47. 教师采用过渡策略(如唱歌、游戏、数数等)以确保幼儿积极投入到过渡环节中					
48. 教师明确详细地教授幼儿交朋友的技能(如帮助、分享、轮流等)					
49. 教师向幼儿描述自己所观察到的幼儿在教室里展示出的社会性情绪能力					
50. 教师支持幼儿去帮助他们的小伙伴学习或者练习社会性情绪能力					
51. 教师与幼儿家长一起制定能够在家庭中使用的解决幼儿问题行为的策略					
52. 教师采用可视化的方式(如使用图片、线条画、照片、杂志剪报)来教授幼儿社会性情绪能力					
53. 教师明确详细地教授幼儿如何加入到所属的社会群体中					
54. 教师跟幼儿确认他们理解了教师发出的指令					

“1”表示明确测量某维度，“-1”表示明确不测量某维度，“0”表示不清楚是否测量某维度					
题项	五个维度				
	建立养育性和回应性的关系	创设高质量、支持性的环境	有针对性的社会性和情绪教学	应对儿童的问题行为	支持家长使用金字塔模型教育实践
55. 教师在幼儿到来之前准备好班级活动					
56. 教师对班级活动进行规划，并且知道自己应当做什么					
57. 教师给幼儿提供适宜的教育活动，让几乎全班的幼儿都能够投入到活动中					
58. 教师明确详细地教授幼儿要关心和尊重他人					
59. 教师事先做好规划，给幼儿提供练习社会性情绪能力的机会					
60. 教师支持专业机构或专业人士为持续出现问题行为的幼儿制定行为干预方案，并向其提供有关该幼儿问题行为的评估数据					
61. 教师与班里的其他教职工共同协调一日活动的计划并且讨论各自在活动中的角色/职责					
62. 教师明确详细地教授幼儿要自制自控					
63. 教师对有持续性问题行为的幼儿开展个别化的行为干预方案					
64. 教师帮助家长了解有关幼儿社会性情绪发展或者问题行为的社区资源					
65. 教师建立家园双向沟通体系使得家长能够跟教师分享家庭或者幼儿的信息					
66. 教师能识别幼儿问题行为的目的(如为了得到关注、获得玩具等)					
67. 教师与班里的其他教职工轮流组织或者共同组织教育活动					

第三部分：《中国幼儿园教育金字塔问卷》的使用

指导语：幼儿园教师在《中国幼儿园教育金字塔问卷》上的得分反映了她们在班级中实施旨在促进学前儿童社会性、情绪和行为发展的教育实践的频率，对这些教育实践重要性的认识以及开展这些教育实践的胜任力情况。这些得分能够给针对幼儿园社会性、情绪和行为教育的教师专业化发展提供重要信息，比如教师平日较少使用哪些教育实践、在实施哪些教育实践时感到难以胜任等；根据教师在《中国幼儿园教育金字塔问卷》上的得分，相关的教师专业化发展可以明确教师培训的重点内容。然而，因为《中国幼儿园教育金字塔问卷》仅仅是测量在促进儿童社会性、情绪和行为发展方面的师幼互动和教师行为，《中国幼儿园教育金字塔问卷》不能用于对教师资格的评估。

问题一：您认为我们关于使用《中国幼儿园教育金字塔问卷》得分的上述计划怎么样？

问题二：您觉得教师在《中国幼儿园教育金字塔问卷》的得分能给相关教师专业化发展提供多少信息呢？

问题三：在使用《中国幼儿园教育金字塔问卷》得分时，还可能出现哪些非预期的后果呢？

APPENDIX G
COGNITIVE INTERVIEWING PROTOCOL

Date: _____ Interviewee ID: _____ Interviewer initials: _____

START TIME: _____ END TIME: _____

Instructions for Cognitive Interviewer

- To start the interview, read the “Instructions to be Read to Interviewee” either verbatim or paraphrased.
- When you start, make sure to enter the START TIME.
- Use the suggested probes that are written in the protocol and other probes you can think of. Don’t feel that you need to probe every question extensively. Use conditional probes listed in Appendix as necessary.
- Enter comments, under each questionnaire item, about problems or issues that come up.
- When you are done, enter the END TIME.
- Look back over the protocol and add other comments as appropriate.

Instructions to be Read to Interviewee

Note to Interviewer

Either read these instructions in their entirety or paraphrase them (but make sure to include elements 1-6)

“Thank you for participating in this interview. Let me first tell you a little more about what we will be doing today.

1. We are testing a new questionnaire with the help of people such as yourself.
2. The purpose of this interview is to find out what you think about the items on our questionnaire, so we can get a better idea of how these questionnaire items are working.
3. This interview includes 3 sections and I will be handing you a material for each section. For the first section, I would like you to think aloud as you answer each questionnaire item – just tell me everything you are thinking about as you go about answering them. For the second and third sections, I will ask you more questions about the terms or phrases in the questionnaire items and what you think a question is asking about. I will take notes.
4. Please keep in mind that I really want to hear all of your opinions and reactions. Don’t hesitate to speak up whenever something seems unclear, is hard to answer, or doesn’t seem to apply to you.
5. Finally, we will do this for about an hour, unless I run out of things to ask you before then.
6. Do you have any questions before we start?”

Section 1: Think-Aloud

Interviewer: “When you are answering each of the following 15 questionnaire items, I would like you to say out loud all the things that come into your head when you are choosing your answer” (If clarification is requested, the interviewer can say, “Tell me everything you are thinking as you answer a questionnaire item”, or “Tell me out loud any thoughts that go through your mind.”)

- Hand the **Material A** that includes the following 15 questionnaire items to the interviewee.

15 Questionnaire Items	
Item 1	I join in children’s play AND engage in conversations about their play.
Item 4	I have a plan for classroom activities AND know what I should be doing.
Item 16	I provide developmentally appropriate activities that will support the engagement of almost all of the class.
Item 17	I assist individual children in selecting activities AND becoming actively engaged.
Item 20	I check in with children to make sure they understand the directions.
Item 21	I individualize directions for children who need more support.
Item 26	I explicitly teach children how to develop autonomy AND independence.
Item 32	I explicitly teach children how to recognize emotions in themselves OR others.
Item 36	I review posted classroom expectations OR rules of behavior with children.
Item 42	I provide individualized assistance to help children maintain interactions (multiple interaction exchanges) with their peers.
Item 46	I engage children in generating possible solutions to common classroom social or emotional problems.
Item 47	I use visuals (e.g., pictures, line drawings, photographs, magazine clippings) to teach children positive social or emotional skills.
Item 55	I provide positive attention OR descriptive praise when children who exhibit challenging behavior begin behaving appropriately.
Item 63	I provide families with information on community resources related to children’s social-emotional development OR challenging behavior.
Item 66	I work with families to collect information on the behavior of children to determine if there is a need for more intensive support or a written plan to address children’s challenging behavior.

Section 2: Concurrent Verbal Probing¹

Interviewer: “Now, I am going to give you another 10 questionnaire items to answer. While you respond to each item, I will be asking you some question(s).”

- Hand the **Material B** that includes the following 10 questionnaire items to the interviewee. Proceed with the first questionnaire item and its scripted probe, and then go to next item. Repeat this process until all items are completed.

Questionnaire Item	Scripted Probes
Item 3 I use alternative strategies to communicate with children who are language delayed.	Meaning-oriented probe: “What does the term ‘alternative strategies’ mean to you?” or “what, to you, is ‘alternative strategies’?” Translation-oriented probe: “Is ‘替代性策略’ the best way to translate ‘Alternative Strategies’?”
Item 9 I use different methods of communication with different families to connect with all families.	Elaborative probe: “Why do you say [the interviewee’s answer]?” Fairness-oriented probe: “What type of families do you think should be included in this item”
Item 10 I establish bi-directional communication systems that offer families a way to share information about the family or child with the teacher.	Paraphrasing: “Can you please repeat this item in your own words?” or “What is this item asking?” Recall probe: “How do you remember this?” or “What time period were you thinking about?”
Item 11 I structure at least one small-group activity during a day.	Meaning-oriented probe: “What does the term ‘small-group activities’ mean to you?” or “What, to you, is ‘small-group activities’?” Process-oriented probe: “How did you arrive at that answer? Tell me what you were thinking.”
Item 25 I explicitly teach children how to initiate AND respond to peers.	Hypothetical probe: “What would it take for you to say [the interviewee’s answer]?” Evaluative probe: “Do you feel this item is easy or not easy to answer?”
Item 30 I explicitly teach children about emotion vocabulary (e.g., happy, sad, proud).	Recall probe: “How do you remember this?” or “What time period were you thinking about?” Fairness-oriented probe: “Were you thinking here of children with special needs, or all children?”
Item 39 I individualize instruction of positive social or emotional skills based on children’s developmental needs.	Elaborative probe: “Why do you say [the interviewee’s answer]?” Recall probe: “How do you remember this?” or “What time period were you thinking about?”
Item 43 I use peer-mediated strategies to support peers to learn AND	Evaluative probe: “Do you feel this item is easy or not easy to answer?”

¹ Concurrent verbal probing refers to applying verbal probes as the questionnaire items are administered to the interviewees (Willis, 2015).

	practice pro-social behaviors for use with their classmates who have social skills delays.	Paraphrasing: "Can you please repeat this item in your own words?" or "What is this item asking?"
Item 53	I state the expected behavior or provide instruction on an acceptable alternative behavior when responding to challenging behavior	Process-oriented probe: "How did you arrive at that answer? Tell me what you were thinking." Hypothetical probe: "What would it take for you to say [the interviewee's answer]?"
Item 58	I participate in the development of a written plan to address children's challenging behavior by providing assessment data.	Meaning-oriented probe: "What does the term 'a written plan to address children's challenging behavior' mean to you?" or "What, to you, is 'a written plan to address children's challenging behavior'?" Translation-oriented probe: "Is '问题行为干预方案' the best way to translate 'A Written Plan to Address Children's Challenging Behavior'?"

Section 3: Retrospective Verbal Probing²

Interviewer: “Now, I will be giving you the last 10 questionnaire items and please answer each item. When you have completed these items, we will begin the interview about how you answered each item.”

- Hand the **Material C** that includes the following 10 questionnaire items to the interviewee. Wait until the interviewee finishes answering all items and then proceed with the probes for specific areas of each item.

	Questionnaire Item	Scripted Probes
Item 2	I respond to children’s ideas by asking questions AND making comments.	Hypothetical probe: “What would it take for you to say [the interviewee’s answer]?” Evaluative probe: “Do you feel this item is easy or not easy to answer?”
Item 5	I coordinate daily schedules AND discuss roles/responsibilities with other staff members.	Recall probe: “How do you remember this?” or “What time period were you thinking about?” Fairness-oriented probe: “What kind of staff members were you thinking about in this item?”
Item 14	I use transition strategies (e.g., songs, games) to keep children actively engaged in the transitions.	Recall probe: “How do you remember this?” or “What time period were you thinking about?” Paraphrasing: “Can you please repeat this item in your own words?” or “What is this item asking?”
Item 15	I effectively guide individual children who need extra support during the transitions.	Process-oriented probe: “How did you arrive at that answer? Tell me what you were thinking.” Elaborative probe: “Why do you say [the interviewee’s answer]?”
Item 22	I explicitly teach children classroom expectations or rules of behavior.	Evaluative probe: “Do you feel this item is easy or not easy to answer?” Hypothetical probe: “What would it take for you to say [the interviewee’s answer]?”
Item 27	I explicitly teach children how to develop self-confidence AND self-esteem.	Elaborative probe: “Why do you say [the interviewee’s answer]?” Meaning-oriented probe: “What does the term ‘self-confidence’ mean to you? And what does the term ‘self-esteem’ mean to you? What are the differences between these two terms?”
Item 29	I explicitly teach children how to show concern AND regard for others.	Meaning-oriented probe: “ <i>What does the term ‘explicit teaching’ mean to you?</i> ” Translation-oriented probe: “Is ‘明确详细地教授’ the best way to translate ‘Explicitly Teaching’?”
Item 31	I explicitly teach children how to participate as part of a social group.	Paraphrasing: “Can you please repeat this item in your own words?” or “What is this item asking?” Process-oriented probe: “How did you arrive at that answer? Tell me what you were thinking.”
Item 40	I use descriptive praise when	Meaning-oriented probe: “ <i>What does the term ‘descriptive</i>

	children engage in positive social or emotional skills.	<i>praise' mean to you?" or "What, to you, is 'descriptive praise'?"</i> Translation-oriented probe: "Is '描述性评价' the best way to translate 'Descriptive Praise'?"
Item 61	I monitor children's progress on the written plan by collecting data related to their challenging behavior.	Meaning-oriented probe: " <i>What does the term 'challenging behavior' mean to you?" or "What, to you, is 'challenging behavior'?"</i> Fairness-oriented probe: "What kind of children did you think of when you hear 'children with challenging behavior'?"

Appendix: Conditional Probes When Needed³

If the interviewee:	The interviewer may respond:
Asks what s/he is supposed to do ...	"I am interested in what you are thinking as you answer each item. Do whatever you need to help you think aloud about the item."
Appears to be having difficulty thinking aloud ...	"Tell me what you are thinking." "What thoughts are going through your mind right now?" "I noticed that you hesitated – tell me what you were thinking?"
Answers after a period of silence	"You took a little while to answer that question. What were you thinking about?"
Answers with uncertainty, using explicitly cues such as "um", "ah", changing an answer, etc.	"You seem to be somewhat uncertain. If so, can you tell me why?" "What caused you to change your answer?"
Erroneous answer; verbal report implies misconception or inappropriate response process	Clarify interviewee's understanding of the particular term or the process used. For example, if the interviewee appeared to misunderstand the term "descriptive praise", probe the term ("so you don't provide positive feedback to a child using words that describe the behavior for which the child is being praised")
Requests information instead of providing an answer	"If I weren't available or able to answer, what would you decide it means?" "Are there different things you think it might mean? What sorts of things?"
Is thinking aloud with no difficulty ...	"That's great. Thinking out loud like this is just what I need." "Good. Your comments help me understand what you're thinking about."
Say something unexpected ...	"How did you come up with [the interviewee's response]?" "Why did you say [the interviewee's response]?" "What do you mean by saying '[the interviewee's response]'?" "How did you arrive at [the interviewee's response]?"

APPENDIX H
ENGLISH VERSION OF THE SETP-C USED FOR THE PRESENT STUDY

Social-Emotional Teaching Practices Questionnaire – China

May 2017

Hello!

My name is Li Luo. I am a doctoral student in early childhood special education at the University of Florida. I am inviting you to participate in a survey study (IRB201701186). The purpose of this survey is to understand Chinese preschool teachers' perspectives about preschool social, emotional, and behavioral teaching practices. Your responses will offer information about the frequency of use and confidence with implementing social, emotional, and behavioral teaching practices in everyday routines and activities.

This survey will take about 10 minutes to complete. If you choose to participate, your information will be kept both anonymous and confidential and your name will not appear anywhere on the survey.

Please answer each question and return the completed survey. Completion and return of the survey will indicate your consent to participate in this study.

There are no anticipated risks or direct benefits to you as a participant in this study. You will not be compensated for completing the survey.

If you have any questions regarding your rights as a research participant, please contact the University of Florida Institutional Review Board 02 Office at (352) 392-0433 or irb2@ufl.edu.

Please feel free to ask any questions about this study or let me know if you need any additional information. Thank you very much for helping with this study.

Sincerely,

Li Luo, M.Ed
University of Florida
Luoli@ufl.edu
Cell phone: (86)15810205292

Patricia Snyder, Ph.D.
Doctoral Advisor to Li Luo
Professor and David Lawrence Jr. Endowed Chair in Early Childhood Studies
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Listed below are 70 teaching practices. These are practices that preschool teachers might use to support young children’s social, emotional, and behavioral development and learning. For each teaching practice listed, there are two sections to which you should respond: (1) **how often** you use the teaching practice in your classroom, and (2) **how confident** you are about using the teaching practice in your classroom.

Please read each teaching practice and think about your behaviors or actions in your classroom during the past 6 months. Then, rate each teaching practice across the two sections using the 1 to 6 scale for each section shown below. Place a checkmark (✓) on the number that corresponds to the rating you want to use. The text in the table below shows what each number means for Section I and Section II.

Rating	①	②	③	④	⑤	⑥
Section I: How Often?	Almost never	Very rarely	Rarely	Occasionally	Very frequently	Almost always
Section II: How Confident?	Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Very confident	Extremely confident

Teaching Practice	Section I How Often <i>you use this practice in your classroom?</i>	Section II How Confident <i>you are about using this practice?</i>
1. While they are playing, I talk with children about their play.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
2. I respond to ideas children share with me by making comments or asking questions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
3. I use alternative strategies to communicate with children who are language delayed.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
4. I coordinate the planning for daily activities with other staff members in the classroom.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
5. I discuss and coordinate responsibilities for implementing daily activities with other staff members in the classroom.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
6. I work with other staff members in the classroom to take turns leading or co-leading activities.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
7. I provide families with information on what is occurring in the classroom every day.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
8. I use different methods of communication with different families to connect with all families.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
9. I establish bi-directional communication systems with families.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
10. I structure at least one small-group activity during a day.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
11. I prepare classroom activities before children arrive at the activity.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
12. I plan the daily schedule so children spend more time in child-directed activities than teacher-directed activities.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
13. I use transition strategies (e.g., songs, games) to keep children actively engaged in the transitions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
14. I effectively guide individual children who need extra support during the transitions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
15. I provide developmentally appropriate activities that will support the engagement of almost all of the class.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

Rating	①	②	③	④	⑤	⑥
Section I: How Often?	Almost never	Very rarely	Rarely	Occasionally	Very frequently	Almost always
Section II: How Confident?	Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Very confident	Extremely confident

Teaching Practice	Section I How Often <i>you use this practice in your classroom?</i>	Section II How Confident <i>you are about using this practice?</i>
16. I assist individual children in selecting activities and becoming actively engaged.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
17. I provide children with multiple opportunities to make choices within activities.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
18. I use directions that tell children what to do rather than what not to do.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
19. I check in with children to make sure they understand the directions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
20. I individualize directions for children who are not able to follow the directions given to all children in the classroom.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
21. I explicitly teach children classroom rules of behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
22. I explicitly teach children friendship skills (e.g., helping, sharing, taking turns).	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
23. I explicitly teach children social problem solving (e.g., resolve conflicts with peers).	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
24. I explicitly teach children how to initiate and respond to peers.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
25. I explicitly teach children how to develop autonomy and independence.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
26. I explicitly teach children how to develop self-confidence and self-esteem.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
27. I explicitly teach children how to develop self-restraint and self-control.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
28. I explicitly teach children how to show concern and regard for others.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
29. I explicitly teach children about emotion vocabulary (e.g., happy, sad, proud).	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
30. I explicitly teach children how to participate as part of the collective.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
31. I explicitly teach children how to develop a sense of belonging.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
32. I explicitly teach children how to recognize emotions in themselves or others.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
33. I explicitly teach children appropriate ways to express their emotions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
34. I explicitly teach children how to regulate their emotions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

Rating	①	②	③	④	⑤	⑥
Section I: How Often?	Almost never	Very rarely	Rarely	Occasionally	Very frequently	Almost always
Section II: How Confident?	Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Very confident	Extremely confident

Teaching Practice	Section I How Often <i>you use this practice in your classroom?</i>	Section II How Confident <i>you are about using this practice?</i>
35. I explicitly teach children how to show empathy to others.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
36. I post classroom rules of behavior in the classroom.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
37. I describe my observations of children in the classroom who demonstrated positive social or emotional skills.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
38. I model expected positive social or emotional skills while describing my behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
39. I individualize instruction of positive social or emotional skills based on children's developmental needs.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
40. When praising children, I describe the positive social or emotional skills for which the children are being praised.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
41. I provide children with planned opportunities or activities to practice positive social or emotional skills.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
42. I provide individualized assistance to help children maintain interactions with their peers.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
43. I explicitly teach peers strategies about to interact with their classmates with social skills delays.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
44. I support peers to use pro-social behaviors with their classmates who have social skills delays.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
45. I validate children's emotions by helping children talk about their emotions.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
46. I provide children with strategies to use when they are angry to calm down.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
47. I engage children in generating possible solutions to common classroom social or emotional problems.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
48. I use role-playing to teach children positive social or emotional skills.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
49. I use visuals (e.g., pictures, line drawings, photographs, magazine clippings) to teach children positive social or emotional skills.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
50. I plan lessons to systematically teach children positive social or emotional skills.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
51. I use routines to teach children positive social or emotional skills.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
52. I use eduplay to teach children positive social or emotional skills.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
53. I embed instruction of positive social or emotional skills into curricular domains other than the social domain.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

Rating	①	②	③	④	⑤	⑥
Section I: How Often?	Almost never	Very rarely	Rarely	Occasionally	Very frequently	Almost always
Section II: How Confident?	Not at all confident	Slightly confident	Somewhat confident	Moderately confident	Very confident	Extremely confident

Teaching Practice	Section I How Often <i>you use this practice in your classroom?</i>	Section II How Confident <i>you are about using this practice?</i>
54. I identify the purpose(s) of children's challenging behavior (e.g., obtain attention or toys).	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
55. I teach children what alternative behaviors to do instead of the challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
56. When challenging behavior occurs, I remind children of classroom rules of behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
57. I implement developmentally appropriate strategies (e.g., redirection, planned ignoring, taking a break from an activity) in response to challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
58. When children who exhibit challenging behavior begin behaving appropriately, I describe the appropriate behavior for which they are being praised.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
59. I refer children with persistent challenging behavior to a team or individual with expertise related to challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
60. I participate in the development of a written plan to address children's challenging behavior by providing assessment data.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
61. I contribute ideas for strategies to be included on the written plan to address children's challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
62. I implement the written plan to address children's challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
63. I monitor children's progress on the written plan by collecting data related to their challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
64. I provide families with information on the importance of social-emotional development.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
65. I provide families with information on community resources related to children's social-emotional development.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
66. I provide families with information on community resources related to children's challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
67. I give families practical strategies to support their children's social-emotional development.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
68. I work with families to develop strategies that families can use at home to address challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
69. I work with families to collect information on the behavior of children to determine if there is a need for more intensive support or a written plan to address children's challenging behavior.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
70. I involve families in the process of developing a written plan for addressing children's challenging behavior at school.	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

Below are questions about you and your preschool/classroom. Please answer each question.
(Please do not include your name on any section of the questionnaire)

Q1. Where is your preschool located? _____

Q2. What is the funding source for your preschool? Please check (✓) one.

- Educational department
- Public, but non-educational department (including public enterprises and army)
- Private, but receiving funding from government
- Other private

Q3. What is the quality level of your preschool as rated by the *Preschool Quality Rating System*? Please check (✓) one.

- Excellent
- Good
- Acceptable
- Unrated

Q4. What is your role in the classroom? Please check (✓) one.

- Lead teacher
- Assistant teacher
- Other (please specify) _____

Q5. What is your professional title? Please check (✓) one.

- None
- Level 3
- Level 2
- Level 1
- Senior 1
- Senior 2

Q6. What is the highest degree you have earned? Please check (✓) one.

- High school diploma or below
- Normal school graduate
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctoral degree

Q7. Is your degree in any of the following areas? Please check (✓) **all** that apply.

- Early childhood education
- Special education
- Elementary education
- Art education
- Psychology
- Other (please specify) _____

Q8. Do you currently hold a certificate in early childhood education? Please check (✓) one.

- Yes
- No

Q9. How long have you been in a paid teaching position as a preschool teacher?

_____Year(s)_____Month(s)

Q10. How long have you worked in your current preschool?

_____Year(s)_____Month(s)

Q11. Are you currently implementing a social-emotional curriculum in your classroom? If yes, please specify the name of your social-emotional curriculum.

- No
- Yes (please specify name of curriculum) _____

Q12. What is the age of most of the children in your classroom? Please check (✓) one.

- 3- to 4-year olds
- 4- to 5-year olds
- 5- to 6-year olds
- 6- to 7-year olds
- Mixed ages

Q13. Which and how many of the following people work in your classroom each day? Please check (✓) all that apply and list how many for each response you check.

Professional Role	How Many
<input type="checkbox"/> Lead teacher	
<input type="checkbox"/> Assistant teacher	
<input type="checkbox"/> Child-care worker	
<input type="checkbox"/> Other instructional personnel	

Q14. How many children are in your classroom? _____

Q15. How many children in your classroom have been identified as children with disabilities?

Q16. Which categories of disability do children in your classroom have? Please check (✓) **all** that apply.

- Visual impairment
- Hearing impairment
- Speech impairment
- Physical disability
- Intellectual disability
- Psychiatric disability
- Multiple disabilities
- Other (please specify) _____
- Not applicable [if you don't have any children with disabilities in your classroom]

Q17. How many children in your classroom have persistent challenging behavior? _____

Q18. Which kind of support listed below do you most want to receive in preschool social education?

Please check (✓) **one**.

- A specific social-emotional curriculum
- Systematic preservice training
- Attention and support from preschool principal(s)
- Family's support and cooperation
- Inservice coaching from experienced practitioner(s)
- Inservice training from research expert(s)
- Other (please specify) _____

APPENDIX I
CHINESE VERSION OF THE SETP-C USED FOR THE PRESENT STUDY

中国幼儿园社会性情绪教育调查问卷

2017年5月

尊敬的教师，您好！

我叫罗丽，是美国佛罗里达大学教育学院学前儿童特殊教育专业的一名在读博士生。诚挚邀请您参与一项问卷调查研究（IRB201701186）。本项问卷调查的目的在于了解中国幼儿园教师开展的社会性、情绪和行为教育。您的参与将为我们研究幼儿园教师实施社会性、情绪和行为教育的现状和信心提供重要宝贵信息。

本问卷为不记名调查，大约需要花15分钟完成。如果您选择参与本项调查研究，您在本问卷中提供的信息都会被严格保密，您的名字不会出现在问卷的任何地方。

请您认真填答问卷上的每一道题。完成和提交本问卷代表您同意参与本项调查研究。

参与本项调查研究不会给您带来任何可以预见的风险或者直接收益。我们也不会给您提供报酬。

如果您有任何关于调查对象权利的疑问，请与佛罗里达大学伦理审查委员会02办公室联系，电话：(352) 392-0433，邮箱：irb2@ufl.edu。

如果您对本研究有任何问题或者需要其他信息，请您随时提出。非常感谢您的支持！

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以下是 70 道题。每道题列出了一个您可能开展的旨在促进幼儿社会性、情绪或行为发展与学习的教育实践。每道题均分为**实施的频率**和**实施的信心**两个部分。在“实施的频率”一栏，请您回答您平日在班级中实施该教育实践的**频率**；在“实施的信心”一栏，请您回答您在班级中开展该教育实践有多大的**信心**。

本问卷采用六点量表。请您仔细阅读每一道题并根据您过去半年的实际情况，从①到⑥中勾选(✓)一个您最认同的选项。下表中的文字分别解释了两个部分中每个量表数字所代表的含义。

评分	①	②	③	④	⑤	⑥
实施的频率	几乎不曾	很少	偶尔	有时	经常	几乎总是
实施的信心	完全没有信心	有一点信心	有一些信心	比较有信心	非常有信心	完全有信心

教育实践	实施的频率 (指您在班级中实施该教育实践的 频率)	实施的信心 (指您在班级中开展该教育实践的 信心程度)
1. 我与幼儿交谈他们正在玩的游戏	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
2. 我通过提问或评论的方式对幼儿的想法做出回应	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
3. 我采用不同的方式与语言发展迟缓的幼儿交流	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
4. 我与班里的其他保教人员共同制定一日活动的计划	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
5. 我与班里的其他保教人员讨论和协调各自在活动中的职责	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
6. 我与班里的其他保教人员轮流组织教育活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
7. 我每天告知家长班级里发生的事情	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
8. 针对不同家长的特点，我采用不同的沟通方式与他们交流	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
9. 我与家长的沟通是双向互动的	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
10. 我每日至少组织一次小组活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
11. 我在幼儿到来之前已准备好班级活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
12. 我安排幼儿每日自主活动的时间长于教师主导活动的时间	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
13. 我采用过渡策略(如唱歌、游戏等)让幼儿投入到过渡环节	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
14. 我有效地指引需要额外帮助的幼儿过渡到下一个活动	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
15. 我提供适宜的活动让几乎全班的幼儿能投入到活动中	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
16. 在幼儿选择活动时，我根据幼儿的需要给予个别化指导并帮助幼儿投入到所选择的活动中	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
17. 我在一日活动中多次给幼儿提供自主选择的机会	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
18. 我提醒幼儿应该做什么，而非不应该做什么	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
19. 我跟幼儿确认他们是否理解了教师发出的指令	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
20. 对于不能听从全班指令的幼儿，我给他们发出个别化的指令	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥
21. 我清楚地告诉幼儿班级里的行为规则	① ② ③ ④ ⑤ ⑥	① ② ③ ④ ⑤ ⑥

评分	①	②	③	④	⑤	⑥
实施的频率	几乎不曾	很少	偶尔	有时	经常	几乎总是
实施的信心	完全没有信心	有一点信心	有一些信心	比较有信心	非常有信心	完全有信心
教育实践		实施的频率 (指您在班级中实施该教育实践的 频率)			实施的信心 (指您在班级中开展该教育实践的 信心程度)	
22.我帮助幼儿掌握交朋友的技能(如助人、分享、轮流等)	①	②	③	④	⑤	⑥
23.我明确指导幼儿如何解决社会交往问题(如解决同伴冲突)	①	②	③	④	⑤	⑥
24.我明确指导幼儿如何向同伴发起交往以及回应同伴发起的交往	①	②	③	④	⑤	⑥
25.我明确指导幼儿要独立自主	①	②	③	④	⑤	⑥
26.我明确指导幼儿要自尊自信	①	②	③	④	⑤	⑥
27.我明确指导幼儿要自制自控	①	②	③	④	⑤	⑥
28.我明确指导幼儿要关心和尊重他人	①	②	③	④	⑤	⑥
29.我帮助幼儿积累有关情绪的词汇(如高兴、难过、自豪等)	①	②	③	④	⑤	⑥
30.我明确引导幼儿主动参加集体活动	①	②	③	④	⑤	⑥
31.我明确培养幼儿对集体的归属感	①	②	③	④	⑤	⑥
32.我明确引导幼儿识别自己或者他人的情绪状态	①	②	③	④	⑤	⑥
33.我明确指导幼儿要以适当的方式来表达自己的情绪	①	②	③	④	⑤	⑥
34.我帮助幼儿学会调控自己的情绪	①	②	③	④	⑤	⑥
35.我明确提醒幼儿要有同情心	①	②	③	④	⑤	⑥
36.我在教室里粘贴班级的行为规则	①	②	③	④	⑤	⑥
37.我向幼儿描述他们在班级中表现出的社会性情绪能力	①	②	③	④	⑤	⑥
38.我向幼儿示范期望他们学会的社会性情绪能力	①	②	③	④	⑤	⑥
39.我根据幼儿发展的需要对他们进行个别化的社会性情绪教育	①	②	③	④	⑤	⑥
40.在表扬幼儿的社会性情绪能力时,我具体说明表扬的原因	①	②	③	④	⑤	⑥
41.我给幼儿提供练习社会性情绪能力的机会	①	②	③	④	⑤	⑥
42.我给幼儿提供个别化指导以帮助他们维持与同伴的互动	①	②	③	④	⑤	⑥
43.我明确指导幼儿如何与社会性发展迟缓的同伴进行交往	①	②	③	④	⑤	⑥
44.我支持幼儿去帮助社会性发展迟缓的同伴	①	②	③	④	⑤	⑥
45.我通过引导幼儿谈论自己的情绪来确认他们的情绪状况	①	②	③	④	⑤	⑥
46.我给处于愤怒状态中的幼儿提供冷静下来的策略	①	②	③	④	⑤	⑥

评分	①	②	③	④	⑤	⑥
实施的频率	几乎不曾	很少	偶尔	有时	经常	几乎总是
实施的信心	完全没有信心	有一点信心	有一些信心	比较有信心	非常有信心	完全有信心
教育实践		实施的频率 (指您在班级中实施该教育实践的 频率)			实施的信心 (指您在班级中开展该教育实践的 信心程度)	
47.我鼓励幼儿自己想出解决班级常见社会交往问题的办法	①	②	③	④	⑤	⑥
48.我使用角色扮演的策略来培养幼儿的社会性情绪能力	①	②	③	④	⑤	⑥
49.我采用可视化的方式(如使用图片、线条画、照片等)来培养幼儿的社会性情绪能力	①	②	③	④	⑤	⑥
50.我专门组织教育活动来系统性地培养幼儿的社会性情绪能力	①	②	③	④	⑤	⑥
51.我在日常生活中随机对幼儿进行社会性情绪教育	①	②	③	④	⑤	⑥
52.我在游戏活动中随机对幼儿进行社会性情绪教育	①	②	③	④	⑤	⑥
53.我在幼儿园其他领域教育活动中渗透社会性情绪教育	①	②	③	④	⑤	⑥
54.我能识别幼儿问题行为的目的(如得到关注、获得玩具等)	①	②	③	④	⑤	⑥
55.当幼儿发生问题行为时,我引导他们讨论正确的做法是什么	①	②	③	④	⑤	⑥
56.当幼儿发生问题行为时,我提醒他们要遵守班级的行为规则	①	②	③	④	⑤	⑥
57.我采用适当的策略(如重新给予幼儿指导、有计划地忽视、让幼儿暂停活动等)来应对幼儿的突发问题行为	①	②	③	④	⑤	⑥
58.当出现问题行为的幼儿开始表现良好时,我具体表扬幼儿做得好的地方	①	②	③	④	⑤	⑥
59.当幼儿持续出现问题行为时,我会向专业机构/人士寻求帮助	①	②	③	④	⑤	⑥
60.我给专业机构/人士提供幼儿问题行为的信息来制定干预方案	①	②	③	④	⑤	⑥
61.我给专业机构/人士提供解决幼儿问题行为的策略	①	②	③	④	⑤	⑥
62.我会给持续出现问题行为的幼儿实施个别化的干预方案	①	②	③	④	⑤	⑥
63.我收集幼儿问题行为的数据来监控幼儿的进步情况	①	②	③	④	⑤	⑥
64.我帮助家长了解培养幼儿社会性情绪能力的重要意义	①	②	③	④	⑤	⑥
65.我帮助家长了解有关幼儿社会性情绪发展的社区资源	①	②	③	④	⑤	⑥
66.我帮助家长了解有关应对幼儿问题行为的社区资源	①	②	③	④	⑤	⑥
67.我给家长提供促进幼儿社会性情绪发展的实用策略	①	②	③	④	⑤	⑥
68.我与家长一起制定能在家中使用的解决幼儿问题行为的策略	①	②	③	④	⑤	⑥
69.我与家长一起收集幼儿问题行为的相关信息以便判断是否需要对幼儿开展更有强度的干预方案	①	②	③	④	⑤	⑥
70.我邀请家长参与幼儿在园问题行为的干预方案的制定	①	②	③	④	⑤	⑥

下面我们想了解一些关于您和您所在的幼儿园 / 班级的基本信息。请您回答以下几个题。请在一个符合的选项上打勾(✓)。本问卷为不记名调查, 请您根据实际情况放心填答。

1. 您所在幼儿园位于哪个城市? _____
2. 您所在幼儿园的性质是?
 - 教办园
 - 公办性质园
 - 普惠性民办园
 - 其他民办园
3. 您所在幼儿园的级类是?
 - 一级园
 - 二级园
 - 三级园
 - 暂未评级
4. 您的职务是?
 - 主班教师
 - 配班教师
 - 其他(请具体填写) _____
5. 您的职称是?
 - 暂无职称
 - 三级教师
 - 二级教师
 - 一级教师
 - 高级教师
 - 正高级教师
6. 您获得的最高学历是?
 - 高中或以下
 - 中专或中师
 - 大专
 - 本科
 - 硕士
 - 博士
7. 您所学的专业是什么(包括您的所有学历)? 请在所有符合的选项上打勾(✓)。
 - 学前教育
 - 特殊教育
 - 小学教育
 - 艺术教育
 - 心理学
 - 其他(请具体填写) _____
8. 您是否持有幼儿园教师资格证书?
 - 是
 - 否
9. 您从教多长时间? _____年_____月
10. 您在目前所在幼儿园工作多长时间? _____年_____月

11. 您所在班级是否正在使用一套专门的社会性情绪课程（例如“比比和朋友”课程、“共情陪伴”课程）？如果有，请您填写所用的社会性情绪课程的具体名称。
- 没有
- 有（请填写课程名称）_____
12. 目前您班级里大多数幼儿的年龄是？
- 3-4岁
- 4-5岁
- 5-6岁
- 6-7岁
- 混龄班
13. 您班级中共有_____名保教人员
14. 您班级中共有_____名幼儿
15. 您班级中有几名特殊需要幼儿？_____
16. 您班级中特殊需要幼儿的具体残障类型是？请在所有符合的选项上打勾(✓)。
- 视力障碍
- 听力障碍
- 言语障碍
- 肢体障碍
- 智力障碍
- 精神障碍（包括自闭症谱系障碍）
- 多重障碍
- 其他(请具体填写) _____
17. 您班级中有几名幼儿**持续性**地表现出问题行为？_____
18. 在园开展社会领域教育时，您**最**需要得到什么帮助？请在一个符合的选项上打勾(✓)。
- 一套可操作的幼儿园课程
- 职前培养期间的系统学习
- 幼儿园领导的重视和关注
- 家长的支持和配合
- 职后来自幼儿园教研人员的指导
- 职后来自专家的系统培训
- 其他(请具体填写) _____

APPENDIX J VARIABLE CODING SYNTAX

***SPSS syntax to recode missing data;**

```
RECODE F1 F2 F3 F4 F5 F6 F7 F8 F9 F10 F11 F12 F13 F14 F15 F16 F17 F18 F19 F20 F21 F22 F23  
F24 F25 F26 F27 F28 F29 F30 F31 F32 F33 F34 F35 F36 F37 F38 F39 F40 F41 F42 F43 F44 F45 F46  
F47 F48 F49 F50 F51 F52 F53 F54 F55 F56 F57 F58 F59 F60 F61 F62 F63 F64 F65 F66 F67 F68 F69  
F70 C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 C21 C22 C23  
C24 C25 C26 C27 C28 C29 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45  
C46 C47 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67  
C68 C69 C70  
City Region RecodedTypeofPreschool RecodedQualityofPreschool Role ProfessionalTitle  
EducationalLevel Major ECCertificate YearsofTeaching YearsinCurrentPreschool SECurricula ChilAge  
No.ofTeachers No.ofChildren ChildTeacherRatio SpecialNeeds No.ofChildrenwithPersistentCB  
TypeofSupport (-9=SYSMIS).  
EXECUTE.
```

***SPSS syntax to recode demographic variables with two categories;**

```
RECODE Role (1=0) (2=1) (3=2) (SYSMIS=SYSMIS).  
EXECUTE.
```

```
RECODE ProfessionalTitle (1=1) (2=0) (3=0) (4=0) (5=0) (6=0) (SYSMIS=SYSMIS).  
EXECUTE.
```

```
RECODE EducationalLevel (1=1) (2=1) (3=2) (4=0) (5=0) (6=0) (SYSMIS=SYSMIS).  
EXECUTE.
```

```
RECODE Major (1=0) (2=1) (3=1) (4=1) (5=1) (6=1) (SYSMIS=SYSMIS) (10 thru 20=0) (30 thru 90=1)  
(100 thru Highest=0).  
EXECUTE.
```

```
RECODE ECCertificate (1=0) (2=1) (SYSMIS=SYSMIS).  
EXECUTE.
```

```
RECODE SECurricula (1=1) (2=0) (SYSMIS=SYSMIS).  
EXECUTE.
```

```
RECODE ChilAge (1=0) (2=1) (3=2) (4=3) (5=4) (SYSMIS=SYSMIS).  
EXECUTE.
```

```
RECODE SpecialNeeds (0=1) (SYSMIS=SYSMIS) (1 thru 9999=0).  
EXECUTE.
```

```
RECODE No.ofChildrenwithPersistentCB (0=1) (SYSMIS=SYSMIS) (1 thru 9999=0).  
EXECUTE.
```

***SPSS syntax to dummy code demographic variables with more than 2 categories;**

```
RECODE RecodedQualityofPreschool (1=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Quality_Good.  
EXECUTE.
```

RECODE RecodedQualityofPreschool (2=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Quality_Unrated.
EXECUTE.

RECODE Role (1=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Role_AT.
EXECUTE.

RECODE Role (2=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Role_Other.
EXECUTE.

RECODE EducationalLevel (1=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Education_BelowAssociate.
EXECUTE.

RECODE EducationalLevel (2=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Education_Associate.
EXECUTE.

RECODE ChilAge (1=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Age_1.
EXECUTE.

RECODE ChilAge (2=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Age_2.
EXECUTE.

RECODE ChilAge (3=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Age_3.
EXECUTE.

RECODE ChilAge (4=1) (SYSMIS=SYSMIS) (ELSE=0) INTO Age_4.
EXECUTE.

***/SPSS syntax to compute summated composite scores for each latent variable subscale;**

COMPUTE Trelationships=SUM(F1,F2,F3,F4,F5,F6,F7,F8,F9).
EXECUTE.

COMPUTE Tenvironment=SUM(F10,F11,F12,F13,F14,F15,F16,F17,F18,F19,F20).
EXECUTE.

COMPUTE
TSETeachingContent=SUM(F21,F22,F23,F24,F25,F26,F27,F28,F29,F30,F31,F32,F33,F34,F35).
EXECUTE.

COMPUTE
TSETeachingStrategies=SUM(F36,F37,F38,F39,F40,F41,F42,F43,F44,F45,F46,F47,F48,F49,F50,F51,F52,F53).
EXECUTE.

COMPUTE TresponseCB=SUM(F54,F55,F56,F57,F58).
EXECUTE.

COMPUTE TinterventionCB=SUM(F59,F60,F61,F62,F63).
EXECUTE.

COMPUTE Tfamily=SUM(F64,F65,F66,F67,F68,F69,F70).
EXECUTE.

COMPUTE TcRelationships=SUM(C1,C2,C3,C4,C5,C6,C7,C8,C9).

EXECUTE.

COMPUTE TcEnvironment=SUM(C10,C11,C12,C13,C14,C15,C16,C17,C18,C19,C20).
EXECUTE.

COMPUTE
TcSETeachingContent=SUM(C21,C22,C23,C24,C25,C26,C27,C28,C29,C30,C31,C32,C33,C34,C35).
EXECUTE.

COMPUTE
TcSETeachingStrategies=SUM(C36,C37,C38,C39,C40,C41,C42,C43,C44,C45,C46,C47,C48,C49,C50,C
51,C52,C53).
EXECUTE.

COMPUTE TcResponseCB=SUM(C54,C55,C56,C57,C58).
EXECUTE.

COMPUTE TcInterventionCB=SUM(C59,C60,C61,C62,C63).
EXECUTE.

COMPUTE TcFamily=SUM(C64,C65,C66,C67,C68,C69,C70).
EXECUTE.

***/R code to convert csv file to dat file #;**

```
> data<-read.csv("~/Desktop/Dissertation Data_7.24.csv", header=TRUE)
> write.table(data, file("~/Desktop/Dissertation Data_7.24.dat", row.names=FALSE, col.names=FALSE)
```

APPENDIX K ANALYTICAL SYNTAX

Syntax to address research question 1

****/An example of Mplus syntax to evaluate a CFA model;***

Title:

7 Factors CFA Model_How Often section

Data:

file is "M:\Dissertation Data_7.24.dat";

Variable:

names= ID PreID F1-F70 C1-C70 CITY REGION TYPE QUA ROLE TITLE EDU
MAJOR CERT TEACH WORK CURRI AGE NUMt NUMc RATIO SPEN CB SUPPORT
QUA_good QUA_NR ROLE_AT ROLE_oth EDU_B EDU_A
AGE_1 AGE_2 AGE_3 AGE_4
FE1_Sum FE2_Sum FE3_Sum FE4_Sum FE5_Sum FE6_Sum FE7_Sum
Con1_Sum Con2_Sum Con3_Sum Con4_Sum Con5_Sum Con6_Sum Con7_Sum;
Usevariables are PreID F1-F70;
Categorical are F1-F70;
Cluster PreID;
missing are all (-9);

Analysis:

Type = complex;
Estimator is WLSMV;
Iterations = 1000;
Convergence = 0.00005;

Model:

Relationship by F1* F2-F9;
Environment by F10* F11-F20;
Teaching by F21* F22-F35;
Strategies by F36* F37-F53;
CB by F54* F55-F58;
PCB by F59* F60-F63;
Family by F64* F65-F70;
Relationship@1;
Environment@1;
Teaching@1;
Strategies@1;
CB@1;
PCB@1;
Family@1;

Output:

sampstat;
MOD (3.84);
stdyx;
tech4

Savedata:

DIFFTEST=HO.7F.dat;

***/An example of Mplus syntax to compare CFA models;**

Title:

CFA model comparisons_7 factors vs 5 factors__How Often section

Data:

file is "C:\Users\luoli\Desktop\Dissertation Data_7.24.dat";

Variable:

names= ID PreID F1-F70 C1-C70 CITY REGION TYPE QUA ROLE TITLE EDU
MAJOR CERT TEACH WORK CURRI AGE NUMt NUMc RATIO SPEN CB SUPPORT
QUA_good QUA_NR ROLE_AT ROLE_oth EDU_B EDU_A
AGE_1 AGE_2 AGE_3 AGE_4
FE1_Sum FE2_Sum FE3_Sum FE4_Sum FE5_Sum FE6_Sum FE7_Sum
Con1_Sum Con2_Sum Con3_Sum Con4_Sum Con5_Sum Con6_Sum Con7_Sum;
Usevariables are PreID F1-F70;
Categorical are F1-F70;
Cluster PreID;
missing are all (-9);

Analysis:

Type = complex;
Estimator is WLSMV;
Iterations = 1000;
Convergence = 0.00005;
DIFFTEST=HO.7F.dat;

Model:

Relationship by F1* F2-F9;
Environment by F10* F11-F20;
Teaching by F21* F22-F53;
CB by F54* F55-F63;
Family by F64* F65-F70;
Relationship@1;
Environment@1;
Teaching@1;
CB@1;
Family@1;

Output:

sampstat;
MOD (3.84);
stdyx;
tech4;

***/An example of SPSS syntax to estimate Cronbach's alpha for each latent variable subscale;**

RELIABILITY

/VARIABLES=F1 F2 F3 F4 F5 F6 F7 F8 F9
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/SUMMARY=TOTAL.

RELIABILITY

/VARIABLES=F10 F11 F12 F13 F14 F15 F16 F17 F18 F19 F20

```
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/SUMMARY=TOTAL.
```

RELIABILITY

```
/VARIABLES=F21 F22 F23 F24 F25 F26 F27 F28 F29 F30 F31 F32 F33 F34 F35
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/SUMMARY=TOTAL.
```

RELIABILITY

```
/VARIABLES=F36 F37 F38 F39 F40 F41 F42 F43 F44 F45 F46 F47 F48 F49 F50 F51 F52 F53
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/SUMMARY=TOTAL.
```

RELIABILITY

```
/VARIABLES=F54 F55 F56 F57 F58
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/SUMMARY=TOTAL.
```

RELIABILITY

```
/VARIABLES=F59 F60 F61 F62 F63
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/SUMMARY=TOTAL.
```

RELIABILITY

```
/VARIABLES=F64 F65 F66 F67 F68 F69 F70
/SCALE('ALL VARIABLES') ALL
/MODEL=ALPHA
/SUMMARY=TOTAL.
```

Syntax to address research question 2

***/SPSS syntax to compute average composite scores for each latent variable subscale;**

```
COMPUTE Mrelationships=MEAN(F1,F2,F3,F4,F5,F6,F7,F8,F9).
EXECUTE.
```

```
COMPUTE Menvironment=MEAN(F10,F11,F12,F13,F14,F15,F16,F17,F18,F19,F20).
EXECUTE.
```

```
COMPUTE
MSETeachingContent=MEAN(F21,F22,F23,F24,F25,F26,F27,F28,F29,F30,F31,F32,F33,F34,F35).
EXECUTE.
```

```
COMPUTE
MSETeachingStrategies=MEAN(F36,F37,F38,F39,F40,F41,F42,F43,F44,F45,F46,F47,F48,F49,F50,F51,
F52,F53).
EXECUTE.
```

```
COMPUTE MresponseCB=MEAN(F54,F55,F56,F57,F58).
```

```
EXECUTE.  
COMPUTE MinterventionCB=MEAN(F59,F60,F61,F62,F63).  
EXECUTE.
```

```
COMPUTE Mfamily=MEAN(F64,F65,F66,F67,F68,F69,F70).  
EXECUTE.
```

```
COMPUTE McRelationships=MEAN(C1,C2,C3,C4,C5,C6,C7,C8,C9).  
EXECUTE.
```

```
COMPUTE McEnvironment=MEAN(C10,C11,C12,C13,C14,C15,C16,C17,C18,C19,C20).  
EXECUTE.
```

```
COMPUTE  
McSETeachingContent=MEAN(C21,C22,C23,C24,C25,C26,C27,C28,C29,C30,C31,C32,C33,C34,C35).  
EXECUTE.
```

```
COMPUTE  
McSETeachingStrategies=MEAN(C36,C37,C38,C39,C40,C41,C42,C43,C44,C45,C46,C47,C48,C49,C50,  
C51,C52,C53).  
EXECUTE.
```

```
COMPUTE McResponseCB=MEAN(C54,C55,C56,C57,C58).  
EXECUTE.
```

```
COMPUTE McInterventionCB=MEAN(C59,C60,C61,C62,C63).  
EXECUTE.
```

```
COMPUTE McFamily=MEAN(C64,C65,C66,C67,C68,C69,C70).  
EXECUTE.
```

***SPSS syntax to conduct descriptive analyses;**

```
DESCRIPTIVES VARIABLES=Trelationships Tenvironment TSETeachingContent  
TSETeachingStrategies  
TresponseCB TinterventionCB Tfamily TcRelationships TcEnvironment TcSETeachingContent  
TcSETeachingStrategies TcResponseCB TcInterventionCB TcFamily Mrelationships Menvironment  
MSETeachingContent MSETeachingStrategies MresponseCB MinterventionCB Mfamily  
McRelationships  
McEnvironment McSETeachingContent McSETeachingStrategies McResponseCB McInterventionCB  
McFamily  
/STATISTICS=MEAN STDDEV VARIANCE RANGE MIN MAX.
```

***SPSS syntax to conduct correlational analyses;**

```
CORRELATIONS  
/VARIABLES=Mrelationships McRelationships  
/PRINT=TWOTAIL NOSIG  
/MISSING=PAIRWISE.
```

```
CORRELATIONS  
/VARIABLES=Menvironment McEnvironment  
/PRINT=TWOTAIL NOSIG  
/MISSING=PAIRWISE.
```

```
CORRELATIONS
/VARIABLES=MSETeachingContent McSETeachingContent
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.
```

```
CORRELATIONS
/VARIABLES=MSETeachingStrategies McSETeachingStrategies
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.
```

```
CORRELATIONS
/VARIABLES=MresponseCB McResponseCB
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.
```

```
CORRELATIONS
/VARIABLES=MinterventionCB McInterventionCB
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.
```

```
CORRELATIONS
/VARIABLES=Mfamily McFamily
/PRINT=TWOTAIL NOSIG
/MISSING=PAIRWISE.
```

Syntax to address research question 3

****/An example of Mplus syntax to conduct unconditional model;***

Title:
Unconditional Model for How Often section_Factor 1

Data:
file is "M:\Dissertation Data_7.24.dat";

Variable:
names= ID PreID F1-F70 C1-C70 CITY REGION TYPE QUA ROLE TITLE EDU
MAJOR CERT TEACH WORK CURRI AGE NUMt NUMc RATIO SPEN CB SUPPORT
QUA_good QUA_NR ROLE_AT ROLE_oth EDU_B EDU_A
AGE_1 AGE_2 AGE_3 AGE_4
FE1_Sum FE2_Sum FE3_Sum FE4_Sum FE5_Sum FE6_Sum FE7_Sum
Con1_Sum Con2_Sum Con3_Sum Con4_Sum Con5_Sum Con6_Sum Con7_Sum;
usevar = PreID FE1_Sum;
cluster = PreID;
missing are all (-9);
within = ;
between = ;

Analysis:
type = twolevel random;
estimator = ml;

Model:
%within%

```
FE1_Sum;  
%between%  
FE1_Sum;
```

***/An example of Mplus syntax to conduct multilevel model analysis;**

```
Title:  
Multilevel analysis for How Often section_Factor 1
```

```
Data:  
file is "M:\Dissertation Data_7.24.dat";
```

```
Variable:  
names= ID PreID F1-F70 C1-C70 CITY REGION TYPE QUA ROLE TITLE EDU  
MAJOR CERT TEACH WORK CURRI AGE NUMt NUMc RATIO SPEN CB SUPPORT  
QUA_good QUA_NR ROLE_AT ROLE_oth EDU_B EDU_A  
AGE_1 AGE_2 AGE_3 AGE_4  
FE1_Sum FE2_Sum FE3_Sum FE4_Sum FE5_Sum FE6_Sum FE7_Sum  
Con1_Sum Con2_Sum Con3_Sum Con4_Sum Con5_Sum Con6_Sum Con7_Sum;  
usevar = PreID CITY REGION TYPE TITLE MAJOR CERT TEACH CURRI RATIO  
SPEN CB QUA_good QUA_NR ROLE_AT ROLE_oth  
EDU_B EDU_A AGE_1 AGE_2 AGE_3 AGE_4 FE1_Sum;  
cluster = PreID;  
missing are all (-9);  
within = ROLE_AT ROLE_oth TITLE EDU_B EDU_A MAJOR CERT TEACH  
CURRI RATIO SPEN CB AGE_1 AGE_2 AGE_3 AGE_4;  
between = CITY REGION TYPE QUA_good QUA_NR;
```

```
Define:  
Center TEACH RATIO(GRANDMEAN);
```

```
Analysis:  
type = twolevel random;  
estimator = ml;
```

```
Model:  
%within%  
FE1_Sum on ROLE_AT ROLE_oth TITLE EDU_B EDU_A MAJOR CERT TEACH  
CURRI RATIO SPEN CB AGE_1 AGE_2 AGE_3 AGE_4;  
%between%  
FE1_Sum on CITY REGION TYPE QUA_good QUA_NR;
```

Syntax to address research question 4

***/An example of SPSS syntax to conduct the chi-square test of association;**

```
CROSSTABS  
/TABLES=TypeofSupport BY ProfessionalTitle  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ CC PHI  
/CELLS=COUNT EXPECTED COLUMN SRESID  
/COUNT ROUND CELL.
```

***/An example of SPSS syntax to conduct the Fisher-Freeman-Halton exact test;**

```
CROSSTABS
  /TABLES=TypeofSupport BY EducationalLevel
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ CC PHI
  /CELLS=COUNT EXPECTED COLUMN SRESID
  /COUNT ROUND CELL.
```

```
CROSSTABS
  /TABLES=TypeofSupport BY EducationalLevel
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ CC PHI
  /CELLS=COUNT EXPECTED COLUMN SRESID
  /COUNT ROUND CELL
  /METHOD=EXACT TIMER(30).
```

```
CROSSTABS
  /TABLES=TypeofSupport BY EducationalLevel
  /FORMAT=AVALUE TABLES
  /STATISTICS=CHISQ CC PHI
  /CELLS=COUNT EXPECTED COLUMN SRESID
  /COUNT ROUND CELL
  /METHOD=MC CIN(99) SAMPLES(10000).
```

***/An example of SPSS syntax to conduct the test of normality;**

```
EXAMINE VARIABLES=ChildTeacherRatio
  /PLOT BOXPLOT STEMLEAF HISTOGRAM NPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES EXTREME
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
```

***/An example of SPSS syntax to conduct the Kruskal-Wallis test;**

*Nonparametric Tests: Independent Samples.

```
NPTESTS
  /INDEPENDENT TEST (ChildTeacherRatio) GROUP (TypeofSupport)
KRUSKAL_WALLIS(COMPARE=PAIRWISE)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05 CILEVEL=95.
```

```
NPAR TESTS
  /K-W=ChildTeacherRatio BY TypeofSupport(1 6)
  /STATISTICS DESCRIPTIVES QUARTILES
  /MISSING ANALYSIS.
```

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BIOGRAPHICAL SKETCH

Li Luo earned her doctor of philosophy degree from the University of Florida in 2017. Her major area of study was special education with a minor in research evaluation and methodology and coursework concentration in early childhood studies. Her primary research interests focus on evidence-based social-emotional interventions for young children. During her 5 years in the doctoral program, she worked as a research assistant for two Goal 3 (efficacy) research projects funded by the Institute of Education Sciences, served on the student editorial board for the *Young Exceptional Children* journal, co-taught an undergraduate course, and presented at several national and international conferences.

Li earned her bachelor's degree in early childhood education from Northeast Normal University in 2009 and her master's degree in early childhood education from Beijing Normal University in 2012. Her master's thesis named her as one of ten winners of the highly competitive Gu Mingyuan Foundation's Educational Research Award at Beijing Normal University that year. From 2012 to 2016, she was awarded a scholarship from the China Scholarship Council under the Ministry of Education of the People's Republic of China to pursue her doctoral studies in the United States. In 2017, she received the University of Florida Graduate School Doctoral Research Award to conduct her doctoral research overseas. To date, she has five peer-reviewed publications in Chinese and English, contributed chapters in two Chinese early childhood education policy books, and co-authored a translated book focused on the High Scope Approach.

Following the completion of her doctoral degree, Li assumed a position as an assistant professor in the College of Preschool Education, Capital Normal University, located in Beijing, China.