

DEVELOPMENT AND PRELIMINARY VALIDATION OF THE SOCIAL-
EMOTIONAL ASSETS AND RESILIENCY SCALE FOR PRESCHOOL

by

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DISSERTATION ABSTRACT

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Title: Development and Preliminary Validation of the Social-Emotional Assets and Resiliency Scale for Preschool

Assessment of social and emotional learning (SEL) in young children is critical to understanding developmental progress and informing care and instruction. The current study investigated the development of a behavior rating scale designed to measure SEL skills in preschool-age children. The primary objective of this study was to investigate the development of a new strength-based assessment prototype, the Social-Emotional Assets and Resiliency Scale for Preschool (SEARS-Pre).

Items for the SEARS-Pre were developed based on a review of literature and existing measures and evaluated by a content validation panel of ten experts in the field. Following the content validation and revision process, local preschools were recruited to pilot the final SEARS-Pre measure. Eighteen instructors from three preschool programs in Oregon participated and completed a total of 94 SEARS-Pre rating forms for students in their classrooms.

Results from an exploratory factor analysis suggested three factors: Self-regulation/Social competence; 2) Emotion knowledge/Expression; and 3) Empathy/Responsibility. The scale demonstrated strong internal consistency, with alpha values of .95 for Factor 1 (Self-Regulation/Social Competence), .92 for Factor 2

(Emotion Knowledge/Expression), .90 for Factor 3 (Empathy/Responsibility), and .97 for the total score (all three factors).

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CHAPTER I

INTRODUCTION

Federal initiatives such as the No Child Left Behind Act (U.S. Department of Education 2002) have increased public awareness of mandates for measurable outcomes in assessing children's learning and academic progress. In addition to measuring academic outcomes, assessment of social and emotional behavior in young children is critical for understanding developmental progress and for informing care and instruction. Early screening to identify protective factors and existing skills within young children can be used to enhance social and emotional development and promote wellness throughout the lifespan (Masten, 2003).

Studies of early childhood development suggest that students who exhibit certain social-emotional skills in preschool are more likely to be resilient throughout their youth, handling stress better and coping more effectively when faced with adversity (Doll & Lyon, 1998). For example Denham et al. (2003) found that preschoolers' emotion knowledge uniquely predicted social competence in kindergarten. The authors purported that this relation might suggest that students who are able to accurately identify others' emotions may also be able to respond more appropriately to their peers. Additionally, research has shown that emotional resilience during preschool predicted low levels of concurrent anxiety and depression in early childhood (Conway & McDonough, 2006).

A joint position statement by the National Association for the Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) indicated the importance of strength-based assessment in young children, stating that best practices in early childhood education are

represented by coordinated systems of service delivery, with strength-based assessment as an essential component (NAEYC, 2003). Moreover, the Working Group on Developmental Assessment detailed 10 principles for guiding the assessment of young children (Greenspan & Meisels, 1996), including one that identified the need for assessing competencies and strengths: “The assessment process should identify the child’s current competencies and strengths, as well as the competencies that will constitute developmental progression in a continuous growth model of development” (p. 17).

Despite recent shifts toward assessments and interventions that focus on positive behavior, few valid and reliable strength-based assessments of preschool-age children exist. Historically, researchers and practitioners within education, psychology, and other social service disciplines have employed a deficit-oriented approach to mental health assessment and service planning for children. Eligibility for service provision in schools and other public agencies has traditionally been contingent upon children meeting specific criteria for behavioral and emotional disorders. Consequently, the majority of assessments available for measuring social and emotional behavior have been designed to identify problem behaviors (Rudolph & Epstein, 2000). Although many of these measures have strong psychometric properties, they provide limited information about individuals and may place unwarranted stress on problem behaviors.

Effective intervention design requires not only reducing negative behaviors, but also replacing them with positive behaviors (Gresham, 2002). Assessments that identify strengths and resources provide information that can be directly linked to specific outcome goals for interventions targeted toward developing positive behaviors. Strength-

based assessments can be used to measure progress and determine if an intervention has led to increases in target skills and competencies (Batsche, Castillo, Dixon, & Forde, 2008). Additionally, the positive focus of the data from strength-based assessments may increase social acceptability of both the assessments themselves as well as the interventions derived from the assessment data. Thus, educators, parents, and other stakeholders may be more likely to engage in intervention planning that highlights existing competencies in the process.

Study Purpose

As mentioned previously, there are few behavior rating scales available to measure the social and emotional development of children under age 6, and fewer still that primarily assess strengths and assets. Given this need, the purpose of the proposed study is to refine and provide preliminary reliability and validity of a new strength-based assessment prototype, the Social-Emotional Assets and Resiliency Scale for Preschool (SEARS-Pre). Specifically, this study addressed the following research questions:

1. What important domains should be included in a strength-based assessment of social and emotional assets in preschool-age children?
2. Are the items identified in the prototype relevant, appropriate and representative of those domains?
3. What is the underlying factor structure of the SEARS-Pre?
4. What is the internal consistency reliability of the SEARS-Pre?
5. Are there significant differences in SEARS-Pre teaching ratings based on children's age or sex?

CHAPTER II

LITERATURE REVIEW

This literature review focuses on several topics related to social-emotional assessment with young children. The review begins with a brief overview of social-emotional behavior and cognitive development during early childhood, including a description of how these emerging skills relate to changes in self-regulation, social competence, emotion knowledge, empathy, and responsibility. Next, summaries of research studies are presented that identify social and emotional skills associated with school readiness and positive relationships with peers and adults. Social and emotional assessments are described, along with a review of the current shift from a deficit-based perspective toward a framework for identifying strengths and skills associated with positive outcomes. Strength-based assessment is defined, and implications of using a strength-based approach to assessing social and emotional development in young children are discussed. The review of the literature concludes with a rationale for the development of a strength-based social-emotional assessment for preschool-age children. Articles and book chapters for the literature review were obtained using PsychInfo, ERIC, Google Scholar, the CASEL website, and ancestral searches. This review is not intended to be exhaustive, but to provide a foundation for the proposed study.

Social and Emotional Development in Early Childhood

Children in preschool develop rapidly and experience a wide range of emotional, cognitive, and linguistic changes. Research indicates that mastery of these developmental milestones is influenced not only by within-child abilities or genetic predispositions, but also by environmental conditions throughout early childhood

(Shonkoff & Phillips, 2000). Between the ages of 3-5, children are establishing social and emotional skills that will serve as the foundation for school readiness, friendships with peers, and relationships with teachers and other adults. Researchers at the Collaborative for Academic, Social, and Emotional Learning (CASEL) define social and emotional learning (SEL) as “the process of acquiring and effectively applying the knowledge, attitudes, and skills necessary to recognize and manage emotions; developing caring and concern for others; making responsible decisions; establishing positive relationship; and handling challenging situations capably” (Zins & Elias, 2007, p. 234).

It is important to note that social and emotional skills are characterized differently over time, and therefore need to be conceptualized based on age-appropriate developmental expectations. These competencies are intimately connected to cognitive, language, and motor development, and many aspects of a child’s developing social and emotional skills are interdependent (Bronson, 2000). For example, cognitive development influences a child’s ability to control emotional expression and understand social interactions, and a child’s participation in social activities can influence and guide cognitive growth; each domain facilitates progress in others. Therefore, current research and theory related to social-emotional behavior and cognitive development will be described within each domain.

Self-Regulation

Social-Emotional Behavior. Children learn important information through social interactions, and start to replicate behavior seen in other children to achieve similar goals (Shonkoff & Phillips, 2000). As children begin to play more with peers, they are no longer able to depend on adults to interpret their behavioral cues and solve their problems.

Instead, preschool-age children learn to discuss desires and disagreements using words (Bronson, 2000). As children grow more aware of their surroundings and begin to develop a sense of community, they start to understand the importance of rules to govern groups of people, and become more willing to make personal sacrifices to support the community (Epstein, 2009), such as sharing food and taking turns. Play with groups of peers allows children to develop the ability to negotiate conflict, compromise when appropriate, and establish group norms (Shonkoff & Phillips, 2000).

The ability to remember past successes and to find alternative ways to solve problems enables children to be flexible in their thinking and approach when faced with challenges, which decreases the likelihood of impulsivity and emotional outbursts. (Epstein, 2009). They learn to calm themselves quickly after being upset, and are increasingly able to remain calm in disappointing situations. Children enjoy positive experiences with others and desire to behave in ways that increase the probability that these experiences will occur (Dunn, 1995).

Cognitive Development. Cognitive advances in preschool-age children are critical for the development of self-regulation. Between the ages of 3-5, cognition involves a shift from lower brain control, where arousal and desire direct behavior, to higher cortical processing that facilitates attention, problem solving, frustration tolerance, and affect management (Denham & Weissberg, 2004). Language processing skills also mediate emotional experience and responsiveness; as children develop the capacity to articulate their feelings, they are better able to control behavioral and emotional responses (Bronson, 2000).

Preschool-age children are developing the ability to organize thoughts and actions, and exhibit a range of immediate or delayed emotional responses. Although they still think and function primarily in concrete ways, they are less likely to respond impulsively, due to increased control over reasoning skills (Epstein, 2009). Their capacity for mental representation and ability to use language to reflect on past experiences allows them to picture imminent events and consider possible outcomes. This allows them to understand that their needs will be fulfilled in the future, and subsequently they are willing to take turns and wait a short time for gratification (Epstein, 2009; Bronson, 2000). The growing ability to think before acting and to regulate their behavior leads to improved emotional competence and facilitates prosocial interactions.

As children approach toddlerhood, they move from a general interest in exploring their environment toward more focused pursuits, such as setting goals and mastering challenges. They are better equipped to develop rules and strategies for solving problems and achieving goals, and begin to demonstrate persistence when selecting and initiating complex new tasks (Bronson, 2000), such as trying different methods to solve problems. Preschool-age children are able to seek assistance for initial structure, and apply learned strategies selectively to complete tasks independently (Bronson, 2000).

Social Competence

Social-Emotional Behavior. During the preschool years, children's social skills are rapidly expanding. Children are developing a range of social skills that facilitate successful interactions with peers (Epstein, 2009). They are able to initiate conversation, interact cooperatively, and play with more than one other child at a time (Shonkoff &

Phillips, 2000). As their social networks widen, children start to exhibit preferences for certain individuals and develop friendships with select peers (Epstein).

Children at this age are interested in spending more time with other children, and are learning to manage emotions and control behaviors in order to cooperate and interact with others successfully and obtain peer acceptance (Bronson, 2000; Eisenberg & Fabes, 1992). They develop strategies for interacting effectively with peers, such as smiling at other children, starting conversations, and initiating play (Epstein; Shonkoff & Phillips, 2000).

Cognitive Development. Increased regulation of cognitive functioning directly contributes to the development of these social skills. As their cognitive development expands, children develop the capacity to store and retrieve mental images, which allows them to recall past experiences and apply prior learning to new situations (Copple, 2003). For example, children may remember that the last time they shared a toy, their peers responded positively, continued playing with them, and offered to share their toys as well.

Emotion Knowledge

Social-Emotional Behavior. By preschool, most children can deduce basic emotions from expressions or situations, and can distinguish others' feelings even when they differ from their own (Bronson, 2000; Denham & Weissberg, 2004). This developmental stage is characterized by a growing ability to recognize and describe emotions in themselves and others (Bronson, 2000). Children are able to reflect upon emotional experiences to identify and predict possible causes of emotional expressions (Dunn, 1995), and are more likely to recognize cause-and-effect relationships between events and emotions (e.g., understanding that they feel sad because they lost a toy).

Cognitive Development. Cognitive advances in preschool-age children are critical for the development of emotion knowledge. As children's language skills improve, they are increasingly able to identify and verbalize emotions (Nelson, 1996; Denham & Weissberg). Children have greater attentional control, and can focus on the relevant stimuli to recognize and interpret emotions, such as facial expressions and vocal tones (Shonkoff & Phillips, 2000).

Empathy

Social-Emotional Behavior. In addition to identifying and labeling basic emotions, preschool age children are beginning to understand mental states and differentiate between their own and others' preferences (Bronson, 2000). Dramatic role-play activities contribute to the development and understanding of others' perspectives; children are able to act out various scenarios and learn through trial and error what peers may want and expect. Preschool age children can identify ways to comfort people and alleviate their distress, and their desire to work toward positive interactions increases sharing and helping behaviors (Bronson, 2000).

Children are able to consider how their own actions and behavior may influence others' emotions, and to understand or predict others' reactions (Shonkoff & Phillips, 2000).

Cognitive Development. Cognitive development at this age allows for the interpretation of emotional experiences. The ability to understand and recognize more complex dimensions of emotional experiences (e.g., simultaneous emotions and others' perspectives) allows preschool age children to think about how their own emotional expressions and behavior may impact others (Denham, 2003; Epstein). Additionally,

increased organization and memory of previous events may allow children to empathize or identify with others by recalling their own emotional response to similar events.

Responsibility

Social-Emotional Behavior. When preschool age children learn to distinguish self from others, determine cause-and-effect relationships, and develop a sense of community, they begin to recognize how they can contribute to social situations, and to take responsibility for their own actions (Shonkoff & Phillips, 2000). At this age, children are able to understand routines and follow simple rules established at home and in the community (Epstein, 2009). They are able to set goals for themselves and recognize mastery, and begin to develop self-image based on their ability to achieve their goals (Epstein, 2009).

Preschoolers are increasingly able to control their impulses and refrain from forbidden behaviors (Bronson, 2000), such as touching others' property without asking, and they recognize when others' behavior violates their understanding of social norms (Epstein, 2009). Consequently, they may be more likely to stand up for themselves if they believe someone has violated a rule (e.g., if someone tries to take a belonging or does not follow through on a promise).

Cognitive Development. As their working memory improves and they develop a more accurate sense of time, children are able to recall personal experiences and describe events with increasing accuracy (Bronson, 2000). Children can remember basic facts about themselves that are important for establishing themselves in a community, such as name and age, and other distinguishing details. They are also able to remember the

consequences of previous actions, and make choices about how to behave or determine when to ask for help.

According to social-emotional research conducted by the Collaborative for Academic, Social, and Emotional Learning (CASEL), five core competencies are necessary in SEL: *self-awareness, self-management, social awareness, relationship skills, and responsible decision-making* (CASEL as cited in Zins & Elias, 2007). Self-awareness is defined as the ability to recognize one's feelings, thoughts, emotions, and strengths. Self-management includes the ability to monitor, regulate, and appropriately express one's emotions, impulses and behavior to set and work toward desired goals. Social awareness involves the ability to recognize others' emotions, take other people's perspectives, and empathize. Relationship skills are defined as the ability to cooperate and manage conflicts to maintain healthy and rewarding relationships. Responsible decision-making includes the ability to make decisions that lead to healthy and safe results in academic and social situations (Zins & Elias, 2007).

A substantial amount of evidence supporting the importance of SEL in early childhood, for both concurrent and later mental wellbeing, has amassed over the last decade (Fantuzzo, Bulotsky, McDermott, Mosca, 2003; Izard et al., 2001; Ladd, Birch, & Buhs, 1999; Raver & Knitzer, 2002; Riggs, Blair, & Greenberg, 2003; Shields et al., 2001; Shonkoff & Phillips, 2000; Sroufe, Egeland, Carlson, & Collins, 2005). Despite this strong evidence base, the increasingly high stakes for academic achievement at the elementary school level have resulted in an emphasis on cognitive development in early education programs, often at the expense of SEL skill development (National Research Council, 2001; Raver, 2002).

School Readiness

The concept of “school readiness” is typically associated with language skills, intellectual competencies, and preacademic skill development, particularly in the areas of early literacy and numeracy skills (e.g., Welsh, Nix, Blair, Bierman, & Nelson, 2010). However, recent studies indicate that early social and emotional competencies have a substantial influence on how children adapt to both social and academic contexts in school (Konold & Pianta, 2005; Ladd et al., 1999; Lane et al., 2007; McClelland & Morrison, 2003; Raver & Knitzer, 2002). Researchers have demonstrated that children who enter kindergarten with positive profiles of SEL skills (e.g., able to make friends, initiate positive relationships with teachers, and manage/regulate emotions) are more likely to adjust well to school and experience academic success (Ladd et al., 1999). Social and emotional factors such as emotional regulation, emotion knowledge, conflict resolution without aggression, and cooperation with peers and adults have been shown to uniquely predict long-term academic success, even when earlier academic success and other potentially confounding variables are taken into account (Carlton, 2000; Izard et al., 2001; Konold & Pianta, 2005; Raver, Garner, & Smith-Donald, 2007).

For example, in a study of preschooler’s classroom adaptation, Shields et al. (2001) assessed children’s emotion regulation and understanding of emotions in themselves (i.e., self-awareness, emotion coping) and in others (i.e., emotion recognition, affective perspective taking, situation knowledge), and adjustment to school. Emotion regulation at the beginning of the school year was positively associated with school adjustment at the end of the year, as was the ability to take another person’s affective perspective and accurately identify situations that would produce different emotional

responses. Relationships with teachers and peers during early childhood predicted positive engagement and achievement in the transition to formal schooling; however, positive teacher and peer relations were also dependent on children's ability to identify others' emotions and modulate their own emotions (Bierman et al., 2008; Denham, 2006).

Peer Relationships

In preschoolers, SEL skills are primarily developing in the context of engaging socially with others and managing emotional arousal within those social interactions (Denham & Weissberg, 2004). Most preschoolers can deduce basic emotions from facial expressions or situations, but children who are able to apply emotion knowledge during interpersonal conflict are rated as more socially skilled by teachers and more likable by their peers (Denham et al., 2003). Emotion regulation and emotion knowledge enable a child to react appropriately to others, which is likely experienced by others as a satisfying and reinforcing exchange. For example, a child who responds to a disappointing or frustrating social situation (e.g., when another child knocks over his block tower) in a calm manner, would likely have more opportunities for positive interactions with peers than a child who responds aggressively (e.g., throwing the blocks or yelling).

In a longitudinal study of preschoolers' social and emotional competence, Denham et al. (2003) assessed emotional expressiveness, emotion knowledge, and emotion regulation in a sample of 143 preschool children ages 3 and 4 years. Sociometric likability and teacher ratings of social competence were measured at preschool and later in kindergarten at age 5. Initial results indicated that in preschool, children who expressed more positive emotions were also more knowledgeable about emotions and better able to regulate their emotions. Interestingly, emotion regulation was

a significant predictor of social competence in preschool; however, emotional expressiveness and emotion knowledge predicted social competence in kindergarten. These findings corroborate previously reviewed research, which suggest emotional skills in preschool lay the foundation for positive development in later years (e.g., Carlton, 2000; Izard et al., 2001; Konold & Pianta, 2005; Raver et al., 2007). Children must learn effective ways to solve interpersonal peer problems while regulating their emotions and remaining calm enough to problem-solve effectively and be open to peer suggestion and compromise.

Teacher Relationships

There is a well-established connection between children's social and emotional behavior and teacher-child relationships (Denham & Weissberg, 2004). Positive interactions with teachers predicts academic success (Pianta, 1997), and children who are able to balance their positive and negative emotions are rated higher by teachers on friendliness and assertiveness and lower on aggression and sadness (Eisenberg et al., 1995). In studies of teachers' ratings of kindergartners, children showing greater conflict with teachers displayed lower levels of classroom participation and achievement (Birch & Ladd, 1998; Ladd et al., 1999). On the other hand, children with developmentally appropriate emotional and social competencies participated more in the classroom and were more accepted and liked by teachers (Raver & Knitzer, 2002). Teachers also provided students with appropriate emotional and social competencies with more instruction and positive feedback (Raver & Knitzer, 2002), likely reinforcing their use of these SEL skills.

Not surprising in light of the aforementioned findings, teachers' perceptions of children's behavior seem to play an important role in the way that they interact with children. Research indicates that children's levels of social and emotional competence predicts the amount of instruction and positive feedback teachers provide them (Raver & Knitzer, 2002). A longitudinal study by Hamre and Pianta (2001) indicated that teachers' judgments about the level of conflict they had with kindergartners better forecasted children's academic and social performance through eighth grade than the same teachers' reports of problem behavior. These findings suggest that children's relational capacities may be a more relevant indication of children's ability to adjust to the school environment than problem behaviors per se.

In a later study, Hamre, Pianta, Downer et al. (2008) evaluated teacher, classroom, and child characteristics that were associated with student-teacher relationships characterized by low levels of conflict in children who exhibited problem behaviors. Using a hierarchically nested sample of preschoolers and teachers, the authors identified the individual, interactive, and classroom factors associated with teachers' ratings of conflict, both before and after adjusting for problem behavior ratings. Results indicated that although half of the variance in teachers' reports of conflict with children was explained by ratings of children's problem behaviors, many children had more or less conflict than predicted based on teacher-rated problem behavior alone. For example, older children were more likely to have high conflict relationships with teachers than expected based on their level of reported problem behaviors. There were also many children who were rated highly for behavior problems, but who had less conflict with teachers than other students with similarly high levels of teacher-reported problem

behaviors. The authors purported that these students may have had characteristics that buffered them from the typical coercive cycles of interactions that sometimes lead to the development of less positive relationships. This explanation opens the possibility that social and emotional skills may buffer some children from the deleterious effects of other risk factors, such as problem behavior.

It is important to understand teachers' perceptions of child behavior, since teachers play a pivotal role in fostering social and emotional development in young children. Research indicates that children with specific SEL deficits, such as those who experience intense negative emotions, may be buffered by other SEL skills, which parents and caregivers can teach (Denham & Weissberg, 2004). Thus, there may be an important role for the assessment of social-emotional skills that inform parent- and teacher-based SEL interventions with young children.

Social-Emotional Assessment

Early assessment of social and emotional behavior in young children is critical for understanding developmental progress and for informing care and instruction. Best practice in social-emotional assessment involves using a multi-method, multi-source, multi-setting assessment to provide a comprehensive profile of an individual, and potentially reduce the error variance that often occurs when relying on only one assessment method (Merrell, 2008; Stormshak & Dishion, 2002). Building a comprehensive assessment system requires the development of ecologically sound multi-informant rating scales. Ecological assessment allows evaluators to obtain information from multiple areas and sources, which can inform decisions and interventions for individuals (Stormshak & Dishion).

To date, there are many psychometrically sound, research-based social and emotional behavior rating scales available (e.g., *The Achenbach System of Empirically Based Assessment*, Achenbach & Rescorla, 2000; *Behavioral Assessment System for Children-Second Edition*, Reynolds & Kamphaus, 2004). The majority of these assessments, however, have been designed to identify pathologies and problem behaviors (Rudolph & Epstein, 2007), and ignore important aspects of children's well-being. As noted by Kral (1989), "If we ask people to look for deficits, they will usually find them, and their view of the situation will be colored by this. If we ask people to look for successes, they will usually find it, and their view of the situation will be colored by this" (p. 32).

Strength-Based Assessment

Focusing on promoting positive outcomes, rather than simply preventing disorder, is a broader and more proactive approach to primary prevention than risk- or deficit-focused approaches (Denham & Weissberg, 2004). Strength-based assessment can inform the development of positive goals, and highlights that these behaviors and characteristics are amenable to change, not fixed entities. Additionally, the ability to measure progress toward development of skills such as emotion regulation may help teachers respond more positively to children (Denham & Weissberg, 2004). A strength-based perspective of assessment identifies the unique skills, resources, life experiences, and needs of children and their families (Tedeschi & Kilmer, 2005). The current shift toward strength-based assessment is aligned with the movement toward a positive psychology or positive youth development (Beaver, 2008; Jimerson, Sharkey, Nyborg, & Furlong, 2004; Seligman & Csikszentmihalyi, 2000).

Epstein and Sharma (1998) provide the following oft-cited definition of strength-based assessment:

The measurement of those emotional and behavioral skills, competencies, and characteristics that create a sense of personal accomplishment, contribute to satisfying relationship with family members, peers, and adults; enhances one's ability to deal with adversity, and promote one's personal, social, and academic development. (p. 3).

The four underlying assumptions of strength-based assessment are: (a) all children have strengths, (b) focusing on children's strengths instead of weaknesses can be motivating for children and improve performance, (c) initial failure to demonstrate a skill should be identified as a chance to learn that skill, rather than a problem, and (d) intervention plans that begin with an emphasis on strengths increase client involvement (Epstein, Dakan, Oswald, & Yoe, 2001). These assumptions guide the assessment and decision-making process. A strength-based approach supports the notion that the purpose of assessment should be to design interventions that target the development of skills and competencies (Batsche et al., 2008).

It is worth noting that a strength-based approach does not rule out consideration or assessment of problems, but is intended to provide a positive framework for discussion and decision-making (Beaver, 2008). Current research indicates that conceptualization of assessment and intervention in mental health is best understood by considering a dual-factor model of mental health, in which assessments of well-being and traditional measures of psychopathology are administered to provide a more comprehensive measure of an individual's mental health. Furthermore, complete mental health is more than just

the absence of pathology (Suldo & Shaffer, 2008). In assessment of young children, understanding both the risk and protective processes at work may help caregivers better understand children's behavior and individualize treatment and instruction planning.

Given the substantial evidence base illustrating the long-term behavioral and academic outcomes associated with early teacher-child relationships (e.g., Hamre & Pianta, 2001), and that teachers' judgments about relationships with students are embedded in their interactions in class settings (e.g., Hamre et al., 2008), a strength-based perspective may help form more positive relationships. If teachers have a positive frame of reference for conceptualizing student behavior and skill development, then it is plausible that they may be more optimistic about improving behavior and interacting positively with the student.

This upsurge of attention to prevention-focused service provisions has resulted in the development of a large number of school-based mental health interventions. Programs designed to promote SEL are being implemented with more and more frequency in schools and early education settings (Zins, Bloodworth, Weissberg, & Walberg, 2004). However, assessments of children's behaviors, skills, and characteristics that are targets of these programs are not often assessed thoroughly. Merrell and Gueldner (2010) note that there may be several reasons for the lack of attention paid to assessing children's behavior within SEL programs. For example, they suggest that the focus of SEL programs is often on curriculum and program acceptability, rather than on assessment which informs SEL intervention. Additionally, many researchers who study the effect of SEL interventions frequently focus their attention on designing the study and on considering practical aspects of implementation, such as

recruitment and treatment fidelity (Merrell & Gueldner 2010). Despite the widely accepted importance of assessment, there is a lack of psychometrically sound assessment tools designed to measure social and emotional competencies in young children.

Current Measures

Currently, there are two widely known multi-informant, strength-based behavior rating scales designed to assess SEL skills in preschool-aged children: The Devereux Early Childhood Assessment (DECA; LeBuffe & Naglieri, 1999), and The Preschool Behavioral and Emotional Rating Scale (PreBERS; Epstein & Synhorst, 2009).

The DECA (LeBuffe & Naglieri, 1999) is a 37-item rating scale designed to measure within-child protective factors for children ages 2-5 years. The DECA was standardized and normed on a large, nationally representative sample, and has demonstrated strong reliability and validity. The items on the DECA form are rated by caregivers using a 5-point response format (*never, rarely, occasionally, frequently, very frequently*) to determine how often a behavior has been observed in the past 4 weeks. The full rating form requires approximately 15-20 minutes to complete, and scores are produced for behavioral concerns and protective factors. The DECA appears to be advantageous due to its focus on resilience or protective factors and its strong technical properties. However, the DECA does not measure several critical social-emotional domains that are important to academic and behavioral outcomes, such as knowledge about emotions, persistence, regulatory skills related to attention control, listening, following directions, planning, as well as prosocial behavior such as perspective taking. Due to the large evidence base supporting the importance of these skills, this is a

significant limitation to the ability of the DECA to comprehensively measure social and emotional skills in young children.

The PreBERS (Epstein & Synhorst, 2009) is a 42-item scale designed to measure behavioral and emotional strengths of preschool children ages 3-5 years. The PreBERS was normed on a large national sample of children enrolled in preschool programs. The scale includes four subscales: Emotion Regulation, School Readiness, Social Confidence, and Family Involvement. The full rating form requires about 10 minutes to complete. The items on the PreBERS form are rated by caregivers using a 4-point Likert-type scale to describe the extent to which the behaviors are seen as being present or absent for the child (*not at all like the child, not much like the child, like the child, very much like the child*). A distinct advantage of the PreBERS is the inclusion of a measure of family involvement and cohesion, an area behavior rating scales do not typically address, but which has been shown to relate to behavioral and emotional development, especially in young children. However, one major limitation of the PreBERS is that it does not include items related to problem-solving, following rules, making decisions, or some aspects of self management (i.e., ability to adapt to changes in routine). These skills are necessary for children to be able to negotiate solutions and manage conflict with peers, and evaluate situations to determine appropriate decisions and behavior (Denham & Weissberg, 2004).

An assessment of social and emotional competencies in young children should include items that identify the necessary skills for positive development, as indicated by research in early childhood. Due to the small number of available strength-based behavior rating scales designed to measure social and emotional competencies, and the

limitations of the measures that exist, more rating scales focused specifically on social-emotional assets and strengths in preschool age children need to be developed and researched. The present study aims to extend the research in this area by creating a behavior rating scale designed to measure the SEL strengths identified by research as critical in preschool aged children.

CHAPTER III

METHOD

The purpose of this study was to refine the Social-Emotional Assets and Resiliency Scale for Preschool (SEARS-Pre), an instrument for the assessment of social and emotional skills in preschool-aged children (3-5 years). The project followed five steps that are supported by literature in scale development (e.g., Anastasi, 1988; DeVellis, 2003; Worthington & Whittaker, 2006): (1) content development, (2) content validation by an expert panel, (3) scale revision, (4) small group pilot study, and (5) preliminary analysis of reliability and validity. The development of the scale consisted of two phases, as depicted in Figure 1. Rather than delineating the research methods through a traditional description of participants, design, instrumentation, and analysis, the proposed methods are outlined in a brief discussion of each of the five steps of the project. Phase 1 of the project involved content development, content validation, and scale revision. Phase 2 of the project involved conducting a small pilot study and conducting preliminary data analysis of the psychometric properties of the instrument, and addressed research questions using statistical analyses.

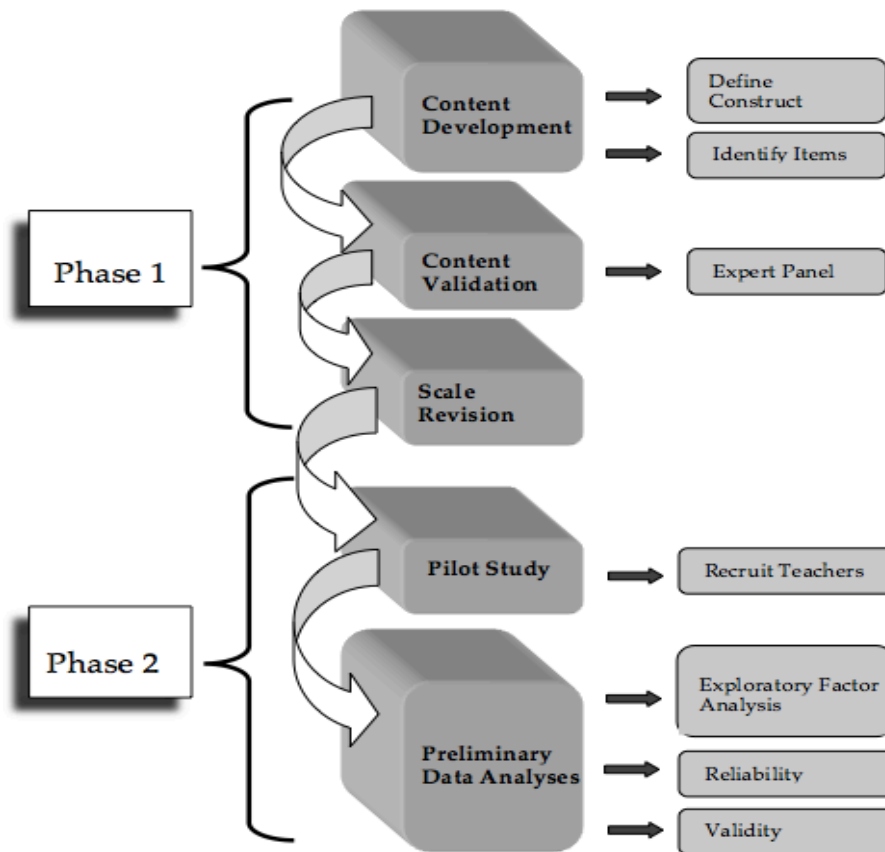
Phase 1

Content Development

The first step of the study involved content development using a rational-theoretical approach to test construction (Merrell, 2008) to address research question one: What important domains should be included in a strength-based assessment of social and emotional assets in preschool-aged children?

The construct of interest for this research study was social and emotional assets and competencies in preschool age children. Preliminary items for the SEARS-Pre had been generated based on the original Social-Emotional Assets and Resilience Scale (SEARS; Merrell, 2007, a strength-based measure designed for use with grades K-12 (ages 5-18). Items had also been adapted from existing scales.

Figure 1. A Model of Each Step Involved in the Two Phases of Scale Development.



Foundational work completed for content development involved having a development team generate preliminary items for the SEARS-Pre. The development team was supervised by Dr. Kenneth G. Merrell (lead author of the SEARS) and

consisted of three doctoral candidates in the School Psychology program at the University of Oregon who had experience working with preschool-age children and knowledge about social and emotional development of young children. A brief description of the team's scale development process will be provided in the following paragraphs, and complete documentation of the scale development and item selection is included in Appendix A.

Although many of the items from the original SEARS were appropriate to include in the SEARS-Pre, there were items and domains that the team did not consider appropriate for use with preschool aged children. For example, certain items related to global self-competence and cognitive strategies were deemed inappropriate for young children considering their level of cognitive development. The group identified 26 items from the SEARS-P and SEARS-T that were appropriate for inclusion.

Next, the team examined existing rating scales that assessed social and emotional behavior in preschool-age children, with a particular focus on scales that measure strengths or protective factors. The team reviewed the following scales: Ages & Stages Questionnaire: Social-Emotional (Squires, Bricker, & Twombly, 2002), Behavioral Assessment System for Children-Second Edition (Reynolds & Camphaus, 2004), Devereaux Early Childhood Assessment (LeBuffe & Naglieri, 2009), Preschool Behavioral and Emotional Rating Scale (Epstein & Synhorst, 2009), Preschool and Kindergarten Behavior Scales-Second Edition (Merrell, 2002), Social Emotional Assessment/Evaluation Measure (Squires & Bricker, 2007), The Social Skills Rating System (Gresham & Elliott, 1990), and Strengths and Difficulties Questionnaire

(Goodman, 1997). The team identified and adapted 58 additional items based on similar rating scales, for a total of 84 items.

To continue developing and refining the items for the SEARS-Pre, the Principal Investigator (PI) of the current study (Ravitch) conducted a comprehensive review of the literature related to social and emotional skill development in preschool-age children to identify critical constructs that differ from development in school-age children and to obtain additional descriptors. A complete list of the sources used in this phase of the research project is included in Appendix B.

The PI revised the SEARS-Pre based on additional items or constructs identified in the systematic analysis of the literature, then reviewed the list of preliminary items in the prototype and eliminated redundant descriptors.

Content Validation

The second step of the study involved content validation by a panel of professionals to address research question two: Are the items identified in the prototype relevant, appropriate and representative of those domains?

A convenience sample of ten experts was requested to provide feedback about each item on the SEARS-Pre. Criteria for recruitment included having a master's or doctoral degree in the fields of early intervention, school psychology, or special education, knowledge of scale development, and a minimum of two years practical experience working in the area of social and emotional development and assessment of young children.

Expert panelists meeting these criteria were invited by email to participate in the content validation aspect of this study. Once panelists agreed to participate, they were

emailed a link to the pilot version of the assessment prototype on the Qualtrics website, and asked to rate each item on a 3-point scale (Appropriate, Borderline appropriate, Not appropriate) in the following domains: (a) representation of age-appropriate skill, (b) appearance of culture or gender bias, (c) appropriateness of the items for teacher judgment, and (d) clarity and conciseness of items, as well as the overall usefulness of the test (2 = very likely to use, 1 = somewhat likely to use, 0 = not likely to use). There was space beside each item for qualitative comments and questions. Finally, panelists were asked to provide information about their degree of expertise based on the following: current profession, years of experience working with young children, highest degree attained, self-rating as to how knowledgeable they consider themselves to be in the area of social and emotional development in young children, and in the area of assessment development (i.e., “very knowledgeable” to “not knowledgeable”). Panelists were asked to respond within 3 weeks of receipt of study materials. A copy of the feedback form that was sent to the panelists is included in Appendix C.

Scale Revision

The third step involved applying the panelist feedback to the items and further revising and refining the scale. A master-rating sheet was created that contained each item number, the corresponding rating that it received, and qualitative comments related to that item. Items rated by experts as “Not appropriate” in any of the areas were reviewed by the PI and revised in some cases. Items that received consistent negative qualitative feedback were either reworded or deleted. As mentioned previously, a detailed description of the stages of scale development and rationale for item revision is included in Appendix A.

Phase 2

Pilot Study

The fourth step involved administering the scale to a small sample of early childhood educators to obtain pilot data to be used for the analysis of the scale's psychometric properties.

Participants. Nineteen general education teachers from early childhood education programs (e.g., private preschools, daycare centers, Head Start) in Lane County were invited to complete the SEARS-Pre on 5-10 typically developing students in their classroom. Typically developing was defined as not currently receiving Early Intervention or Early Childhood Special Education services through an Individualized Family Service Plan. Eighteen teachers completed surveys on four to eight students in their classroom and submitted the SEARS-Pre measures, for a total of 94 students.

Instrument. The Social-Emotional Assets Scale for Preschool (SEARS-Pre) was completed by teachers to assess developing social and emotional skills. As described previously, the SEARS-Pre is based on the original Social-Emotional Assets and Resilience Scale (SEARS; Merrell, 2008), a strength-based measure designed for use with grades K-12 (ages 5-18). Based on the aforementioned two study phases, the scale was refined further after a systematic analysis of the literature and content validation from the expert panel. The scale contained 42 items asking teachers to rate the frequency of student behavior on a 4-point Likert-type scale (0=Never, 1=Sometimes, 2=Often, 3=Always). Each measure was estimated to take 15 minutes to complete. Documentation of the scale development (Appendix A) includes items added, deleted, and modified in Phase 1.

Procedure. Participation in this study was voluntary and anonymous, and no personally identifying information was collected from teacher respondents. The PI sent early childhood education program directors an email detailing the purpose of the study and study procedures. The preschool director was invited to provide all early childhood educators within his/her program a packet of study materials including an invitation to participate in the current study, a short demographics form, directions for completing the SEARS-Pre assessment, at least five copies of the SEARS-Pre assessment protocol, a postage-paid return envelope, and a \$10 gift card to Target attached to each survey. Preschool directors were also informed that if they agreed to disseminate study materials, they would receive a \$25 gift card to Target, Fred Meyer, or the Dollar Store to purchase academic supplements for their program as a thank-you for their effort, regardless of whether the teachers in their program chose to participate. Preschool directors at three different programs in Eugene, Oregon provided the PI with written consent agreeing to provide program teachers with the packet of study materials (see Appendix D for sample letter and consent form sent to preschool program directors).

To ensure teacher confidentiality, preschool directors disseminated the study materials to teachers and were specifically asked not to monitor teacher participation, so that teachers did not feel obligated to participate. All information was gathered from teachers through the use of anonymous paper surveys (see Appendix E). Given that all data collection was anonymous, written consent from teachers was not required.

CHAPTER IV

RESULTS

Content Development

Research question one asked, “*What important domains should be included in a strength-based assessment of social and emotional assets in preschool aged children?*” To identify important domains and associated descriptive items, the PI conducted a comprehensive and systematic review of the literature related to social and emotional skill development in preschool-age children. When developing a scale, the first stages must involve defining the construct clearly, using both existing theory and research to provide a strong conceptual foundation (Worthington & Whittaker, 2006). Literature from 1990 to 2011 was searched in the PSYCHINFO and ERIC databases for studies that identified social and emotional developmental milestones in preschool-age children. Additionally, books on social and emotional development in early childhood were reviewed to determine critical constructs based on relevant theory. Bibliographies of all obtained articles and books were then searched for additional relevant articles. A complete list of sources used in this phase of the research project is located in Appendix B. Overall, 9 articles, 13 books, and 9 other measures were used as sources for additional items related to social-emotional development.

The manual for the original SEARS system (Merrell, 2011) was reviewed to identify the final factor structure and critical domains included in the SEARS system. Four domains were established based on the factors identified in the research processes to develop the original SEARS system: 1) Self-Regulation; 2) Social Competence; 3) Empathy; and 4) Responsibility. A fifth domain, Emotion Knowledge, was added based

on reviewed literature (see Appendix B). These broad domains encompass skills necessary for social and emotional competence: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, as cited in Zins & Elias, 2007). Within each of these domains, items were developed to reflect the characteristics and behaviors that appear to be important for success with peers, adults, academic learning, and long-term development.

Content Validation

To answer research question two, “*Are the items identified in the prototype relevant, appropriate and representative of those domains?*”, ten professionals in the area of social and emotional development and assessment of young children provided feedback on the following: (a) representation of age-appropriate social and emotional skill, (b) appearance of culture or gender bias, and (c) appropriateness of the items for teacher judgment, and (d) clarity and conciseness of items. See Table 1 for panelist characteristics. Items rated by experts as “Inappropriate” or “Borderline appropriate” were reviewed, and in most cases, revised. Items that received consistent negative qualitative feedback were also reworded. Five items were revised to modify semantic aspects of the sentence, while three items were revised to add or change major content. A comprehensive description of each stage of scale development and revision, including revisions based on panelists’ feedback, is included in Appendix A.

Table 1

Characteristics of Content Validation Panel

Characteristics	Number
Job title	
School Psychologist	1
Clinical Psychologist	2
Preschool Director	2
Early Interventionist	2
Assistant Professor	3
Highest degree Earned	
Master's	2
Doctorate	8
Years of experience working with preschool-age children	
1-2 years	1
3-4 years	3
5-6 years	0
Over 6 years	6
Knowledgeability Ratings- Assessment Development	
Very knowledgeable	2
Fairly knowledgeable	7
Somewhat knowledgeable	1
Not knowledgeable	0
Knowledgeability Ratings- Social-emotional development in young children	
Very knowledgeable	4
Fairly knowledgeable	6

Table 1 (continued)

Somewhat knowledgeable	0
Not Knowledgeable	0
Usefulness of this measure for evaluating social-emotional skills in preschool-age children	
Very Useful	9
Somewhat Useful	1
Not useful	0

Exploratory Factor Analyses

Research question three asked, “*What is the underlying factor structure of the SEARS-Pre?*” To address this research question, exploratory factor analyses (EFAs) were conducted using all 94 cases. To explore the validity of the underlying factor structure of the SEARS-Pre, principle axis factoring (PAF) was conducted with an oblique rotation (direct oblimin). Principle axis factoring was used to explain the constructs accounting for the variance of a measure, and was selected instead of principle components analysis because it is most useful for identifying latent variables, rather than reducing the number of items (e.g., Costello & Osborne, 2005; Preacher & MacCallum, 2002). An oblique rotation was used rather than an orthogonal rotation because the SEARS-Pre is intended to measure social and emotional strengths and assets of students, and dimensions of the factors describing these strengths and assets were hypothesized to be intercorrelated (Costello & Osborne, 2005). Data were screened for normality, range restriction, outliers,

missing data, and initial communalities. This initial analysis yielded factor correlations up to .70, which verified the suitability of using an oblimin oblique rotation.

Four steps were taken to determine the factor structure of the SEARS-Pre. The process was iterative and involved the use of both a priori criteria (e.g., use of Kaiser's rule, Scree Plot visual analysis) and evaluator judgment based on the clinical interpretability of findings.

Step 1

The initial exploratory factor analysis was conducted using Kaiser's Rule to extract factors with an eigenvalue of equal to or greater than 1.0 (Kaiser, 1960). This procedure resulted in 5 factors being extracted, explaining 65.08% of the variance in the items (See Table 2). Examination of the item content of those factors yielded clinically uninterpretable results.

Step 2

Upon visual interpretation of the factorial scree plot (see Figure 2), wherein the components are retained based on where eigenvalues drop off, the decision was made to rerun the extraction procedures forcing a three-factor solution. All items were run using a forced three-factor solution based on Kaiser's Rule (Kaiser, 1960). The subsequent three-factor solution accounted for 62.02% of the variance of the 42 items. Item content for these three factors was clinically relevant, and communalities ranged in value from .29 to .81. Communalities measure the percent of variance explained by a single item. Thus, higher communality scores indicate that the item is strongly related to the underlying latent variable (Floyd & Widaman, 1995).

Table 2

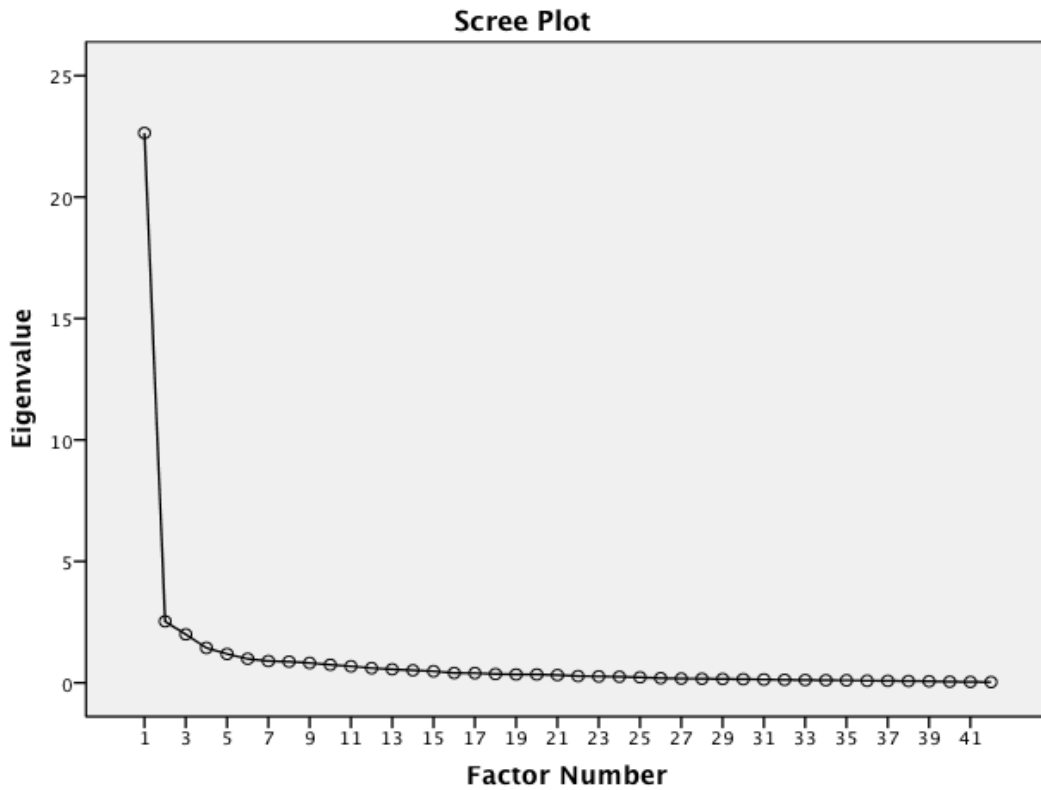
Communalities and Pattern Coefficients of Initial Five Factors (N = 94)

Factor	Communalities		Pattern Coefficients				
	Initial	Extracted	1	2	3	4	5
1.							
9	.81	.67	.37	.35	-.14	.28	-.03
10	.67	.45	.45	.38	-.05	.10	.02
15	.83	.66	.52	-.12	-.31	.07	-.13
21	.81	.65	.46	.01	-.23	.19	-.13
32	.85	.75	.41	-.02	-.11	.31	-.26
36	.82	.69	.47	.02	-.01	.25	-.28
37	.85	.73	.49	.02	-.03	.27	-.25
38	.80	.74	.55	-.21	-.15	.06	-.33
2.							
3	.79	.59	-.14	.60	-.16	-.07	-.28
4	.80	.75	-.09	.51	-.38	.12	-.20
6	.86	.81	.05	.55	-.01	.28	-.33
33	.78	.62	.14	.34	-.19	.19	-.26
3.							
1	.79	.55	-.23	-.01	-.47	.26	-.27
2	.88	.69	-.06	-.05	-.37	.16	-.50
16	.79	.53	.10	.21	-.74	-.16	.15
18	.71	.54	-.09	.04	-.68	.04	-.10
19	.84	.68	-.02	.04	-.69	.14	-.09
20	.89	.80	.08	.06	-.83	-.02	-.03
31	.87	.76	.16	.12	-.55	.23	-.07
35	.85	.74	.16	-.09	-.49	.09	-.35

Table 2 (continued)

39	.81	.49	.23	-.01	-.29	.28	-.09
40	.82	.68	.27	-.19	-.65	.09	-.01
4.							
7	.74	.55	.18	-.05	.14	.62	-.13
8	.87	.70	.30	.17	-.21	.30	-.18
12	.89	.70	.08	.18	-.31	.40	-.16
13	.87	.82	-.05	-.07	-.11	.88	-.02
14	.87	.77	.31	-.07	-.08	.50	-.20
17	.82	.75	.14	-.15	-.42	.47	-.07
22	.75	.67	.13	.11	.05	.82	.16
23	.87	.75	.28	-.13	-.17	.44	-.22
25	.75	.56	.27	.05	-.04	.34	-.25
26	.80	.54	-.09	.18	.04	.49	-.33
30	.88	.71	-.03	.08	-.04	.87	.08
42	.77	.62	-.06	-.05	-.32	.43	-.25
5.							
5	.87	.72	.14	.14	.00	.08	-.68
27	.88	.72	-.03	.11	.03	-.02	-.84
28	.91	.82	.08	-.01	.00	-.08	-.92
29	.78	.65	.09	.15	-.03	-.02	-.70
34	.80	.64	.32	.03	-.14	.17	-.36
41	.80	.62	.10	-.09	-.32	.06	-.49

Figure 2. Scree Plot of Factor Loadings



Step 3

To improve the factor structure, items were removed from the original 42-item pool based on their communalities, factor-loading values, and perceived clinical utility. Decisions were made based on previous scale development of the SEARS (Merrell, 2011). This process resulted in the identification of 14 possible items for removal from the item pool: one item which had a communality value less than .3 (item 10), six items with multiple factor-loading values above .35 (items 4, 6, 7, 17, 36, 38), and seven items with single factor loadings below .4 (items 1, 2, 11, 15, 21, 33, 34). One of these items was retained due to clinical significance, despite having a single factor loading slightly below .4 (item 1 = -.39). Thirteen items were removed (items 1, 2, 4, 6, 7, 11, 15, 17, 21,

33, 34, 36, 38), and an exploratory factor analysis was then run on the remaining 29 items using principal axis factoring with an oblique rotation (direct oblimin), and forcing a three-factor solution. Using Kaiser's Rule, the analysis extracted three factors accounting for 63.56% of the variance. Only one item had a communality below .3 (item 3 = .29), and this item was retained due to clinical relevance. Items 26 and 41 were identified for removal due to multiple factor loadings above .35. All single factor loadings were above .4.

Step 4

An exploratory factor analysis was run on the remaining 27 items using principal axis factoring with an oblique rotation (direct oblimin), and forcing a three-factor solution. Using Kaiser's Rule, the analysis extracted three factors accounting for 64.33% of the variance. All items except for one (item 3 = .29) had communalities above .3. No items loaded below .45 on their respective factor, or had multiple factor loading values greater than .30. The final factor structure included 13 items for Factor 1, 8 items for Factor 2, and 6 items for Factor 3, for a total of 27 items. The final three-factor model is presented in Table 3 with the rotated sums of squared loadings and percent of variance explained by each factor.

Table 3

Sum of Squared Loadings and Percent of Variance Explained by Retained Factors

(*N* = 94)

Factor	Rotation Sums of Squared Loadings*	% of Variance Explained
1	11.70	43.38
2	9.93	36.82
3	10.13	37.56

*When factors are correlated, sums of squared loadings cannot be added to obtain a total variance.

Note. Total percent of variance explained is 64%; the rotated factors are correlated and share variance.

The sorted pattern factor loadings are presented in Table 4. Based on content of items, I labeled the identified factors as (Factor 1) Self-Regulation/Social Competence, (Factor 2) Emotion Knowledge/Expression, and (Factor 3) Empathy/Responsibility. The factor loadings were moderately high. Costello and Osborne (2005) recommend a minimum loading of at least .32. All factor items obtained loadings well above these suggested values, despite the small sample size. Factor 1 was a robust factor with at least five items loading at .50 or higher (Costello & Osborne, 2005). Factors 2 and 3 had lower factor loadings, but were retained due to clinical relevance.

Table 4

*Pattern Coefficients for the Three Factors of the Social-Emotional Assets and Resiliency**Scale for Preschool with Oblimin Oblique Rotation (N = 94)*

Factor	1	2	3
1. Self Regulation/Social Competence			
22: Distracts self after peer conflict	.91	-.07	-.13
13: Calm in disappointing situations	.85	.05	-.04
30: Calms easily after upset	.82	-.03	-.02
14: Takes responsibility when prompted	.77	.05	.12
23: Uses words when angry	.70	.15	.09
32: Takes turns	.67	.06	-.23
37: Shares toys	.62	.08	.20
25: Compromises with others	.55	.06	.23
8: Responds to facial expressions	.48	.25	.23
39: Knows when people are upset	.47	.27	.06
12: Smiles at other children	.46	.29	.21
9: Is accepted and liked by peers	.45	.24	.17
42: Tries different ways to solve problems	.44	.29	.16
2. Emotion Knowledge/Expression			
20: Identifies reasons for own feelings	.01	.92	.00
19: Describes others' emotions	.11	.75	.06
16: Stands up for him or herself	-.10	.72	-.03
18: Describes events using clear communication	-.04	.69	.09
40: Asks for help when needed	.30	.67	-.14
31: Good at identifying feelings	.30	.61	.10
35: Tells adults how he/she feels	.27	.48	.23
1: Smiles/laughs when playing with children	.16	.39	.23
3. Empathy/Responsibility			
27: Comforts upset children	.03	-.07	.89

Table 4 (continued)

28: Shows concern when others' feelings hurt	.07	-.03	.87
24: Helps others solve problems	.16	.00	.75
29: Likes doing things for others	.10	.01	.74
5: Helps other people when needed	.21	.05	.67
3: Other people see him/her as a leader	-.18	.19	.50

Note. Bold item correlations denote items that are part of the corresponding factor.

At this time, data were again screened for normality, range restriction, outliers, missing data, and initial communalities. All factors approached a normal distribution with the exception of Factor 2, which had a moderate negative skew. A reflection and logarithmic transformation minimized skew for Factor 2, but obtained essentially the same results, so the raw analysis is reported as the primary analysis. All other assumptions were met for conducting further analysis using these factors.

Internal Consistency Reliability

Research question four asked, “*What is the internal consistency reliability of the SEARS-Pre?*” Internal consistency reliability of the SEARS-Pre factor scores and total score was estimated using Cronbach’s alpha, a procedure that relies on pairwise correlations of all possible combinations of items within specified clusters. The three factors demonstrated very strong internal consistency, with alpha values of .95 for Factor 1 (Self-Regulation/Social Competence), .92 for Factor 2 (Emotion Knowledge/Expression), and .90 for Factor 3 (Empathy/Responsibility). The internal consistency of the total score (i.e., all 27 items) was also very high, with an obtained

alpha of .97. These alpha coefficients suggest high internal consistency reliability of the three factors and total score of the SEARS-Pre.

Group Comparisons

Research question five asked, “*Are there significant differences in SEARS-Pre teacher ratings based on children’s age or sex?*” A two-way ANOVA was conducted that examined the effect of child sex and child age on the factor scores and the total score of the SEARS-Pre, including a planned comparison using polynomial factors for contrast analysis. Table 5 displays the means and standard deviations for SEARS-Pre Factor and Total scores by child sex and age. Table 6 displays the ANOVA results. The sex by age interaction was not statistically significant for any of the factors or the total score.

Table 5

Descriptive Statistics of the SEARS-Pre Factor and Total Scores

SEARS-PRE	N = 94			
	Min	Max	M	SD
1. Self Regulation/Social Competence	3.00	35.00	21.15	8.27
2. Emotion Knowledge/Expression	2.00	24.00	17.20	5.60
3. Empathy/Responsibility	0.00	18.00	9.10	4.48
Total score	11.00	74.00	47.45	16.59

Table 6

ANOVA Results for the Effects of Child Sex and Age on Factor Scores for the Social and Emotional Assets and Resilience Scales for Preschool

		Between Subjects					
	Source	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η^2
Factor 1	Age	400.43	2	200.21	2.80	.07	.06 ^{††}
	Sex	522.89	1	522.88	7.30	.01*	.08 ^{††}
	Age * Sex	265.70	2	132.85	1.86	.16	.04 ^{††}
	Error	6156.83	86	71.59			
	Total	55704.00	92				
	Corrected Total	7403.30	91				
Factor 2	Age	47.42	2	23.71	.80	.45	.02 [†]
	Sex	258.30	1	258.30	8.71	.00**	.09 ^{††}
	Age * Sex	15.81	2	7.90	.27	.77	.01 [†]
	Error	2549.51	86	29.65			
	Total	29964.00	92				
	Corrected Total	2897.87	91				
Factor 3	Age	97.84	2	48.92	2.89	.06	.06 ^{††}
	Sex	242.67	1	242.67	14.34	.00**	.14 ^{†††}

Table 6 (continued)

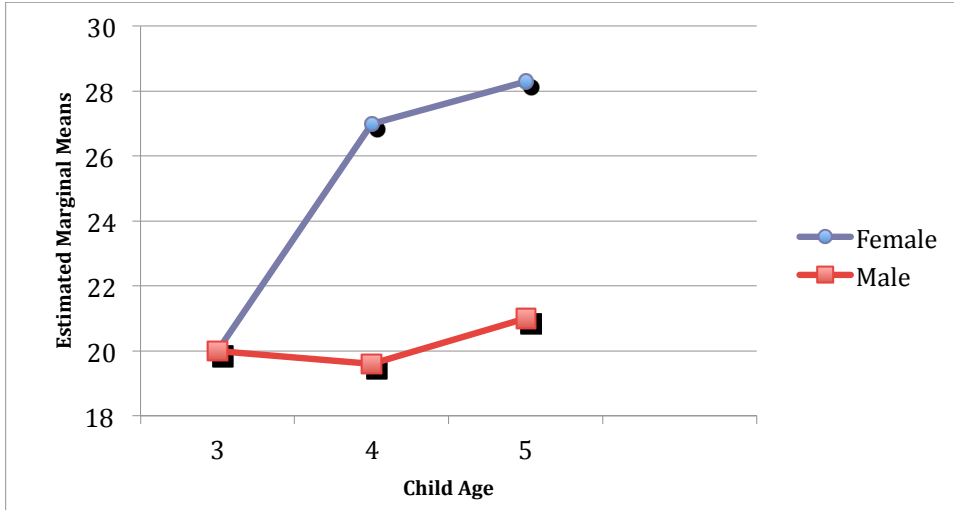
	Age * Sex	10.69	2	5.35	.32	.73	.01 [†]
	Error	1455.46	86	16.92			
	Total	9334.00	92				
	Corrected Total	1845.96	91				
Factor Total	Age	1316.69	2	658.34	2.55	.08	
	Sex	2972.00	1	2972.00	11.50	.00**	
	Age * Sex	472.31	2	236.15	.91	.41	
	Error	22218.62	86	258.36			
	Total	249060.00	92				
	Corrected Total	2783.30	91				

Note. * $p < .01$, ** $p < .001$

[†]Small effect size, ^{††}medium effect size, ^{†††}large effect size

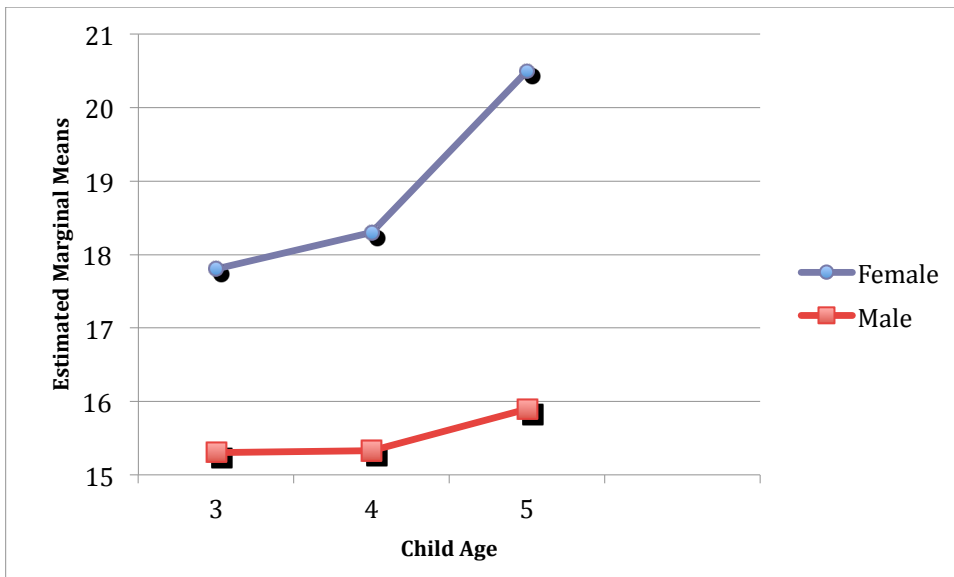
For Factor 1 (Self-Regulation/Social Competence), there was a significant main effect for child sex, such that girls' Factor 1 scores ($M = 25.81$) were significantly higher than boys' Factor 1 scores ($M = 20.62$) $F(1, 91) = 7.30, p = .008$ (see Figure 3). There was no significant main effect for child age. Quadratic contrast effects were explored for all three factors and the total score on the SEARS-Pre, however none of the quadratic contrast effects were significant.

Figure 3. Effect of Age and Gender on Factor 1.



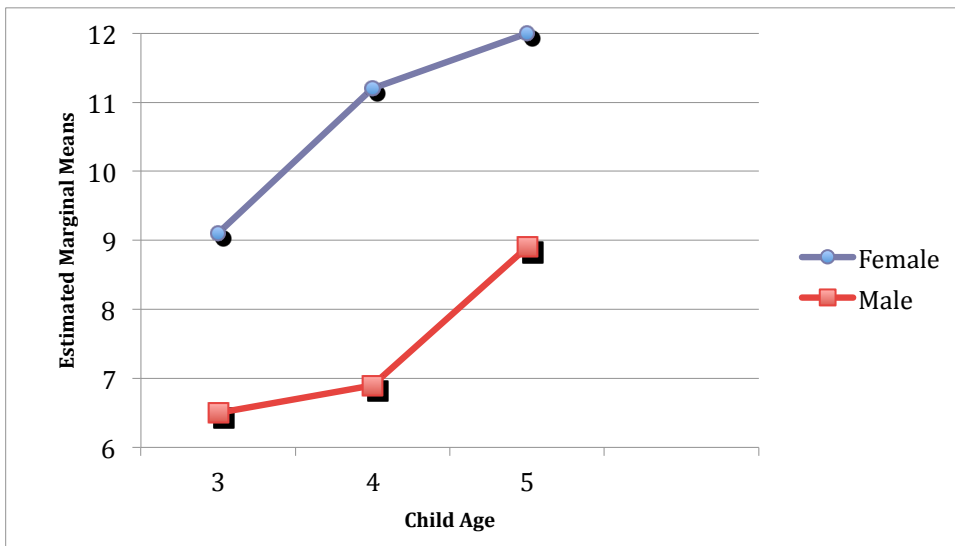
For Factor 2 (Emotion Knowledge/Expression), there was a significant main effect for child sex, such that girls' Factor 2 scores ($M = 18.91$) were significantly higher than boys' Factor 2 scores ($M = 15.50$) $F(1, 91) = 8.71, p = .004$ (see Figure 4). There was no significant main effect for child age.

Figure 4. Effect of Age and Gender on Factor 2.



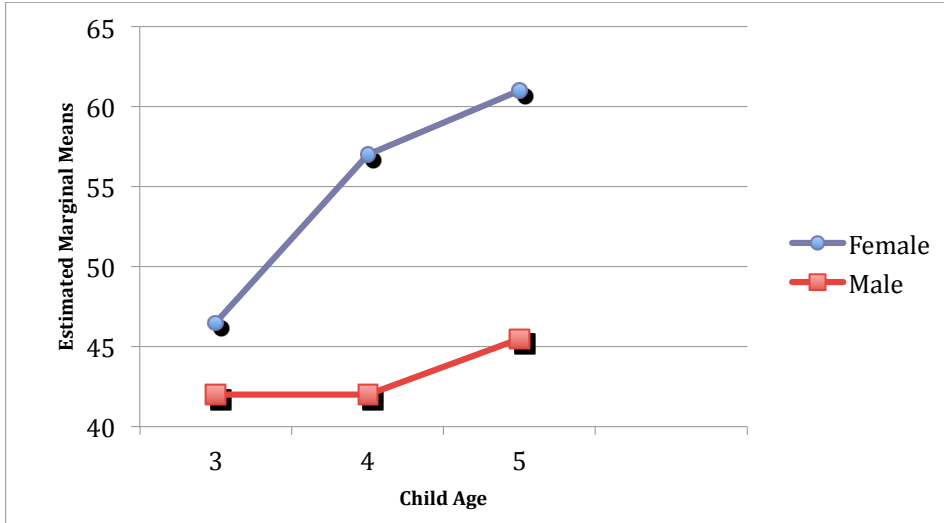
For Factor 3 (Empathy/Responsibility), there was a significant main effect for child sex, such that girls' Factor 3 scores ($M = 10.72$) were significantly higher than boys' Factor 3 scores ($M = 7.41$) $F(1, 91) = 14.339, p = .000$. There was no significant main effect for child age (see Figure 5).

Figure 5. Effect of Age and Gender on Factor 3.



For the SEARS-Pre total score, there was a significant main effect for child sex, such that girls' total scores ($M = 54.83$) were significantly higher than boys' total scores ($M = 43.26$) $F(1, 91) = 11.40, p = .001$ (see Figure 6). There was no significant main effect for child age.

Figure 6. Main Effect of Total Score.



Effect Size

To determine the practical meaning of the differences between SEARS-Pre scores for boys and girls, effect size estimates were calculated. Cohen (1992) suggests effect sizes for various indexes, and offers a conversion table (see Cohen, 1988, p. 283) for eta squared (η^2) where 0.0099 constitutes a small effect, 0.0588 a medium effect and 0.1379 a large effect.

Eta-squared describes the ratio of variance explained in the dependent variable by a predictor while controlling for other predictors (Cohen, 1988). Eta-squared is a biased estimator of the variance explained by the model in the population (it estimates only the effect size in the sample). On average it overestimates the variance explained by the population (Cohen, 1988).

Using eta squared (η^2) to estimate effect size, differences between boys and girls on all SEARS-Pre scores reflected differences in score distributions ranging from .08

to .14, which falls within the medium to large range (Cohen, 1988), and indicates that these differences were meaningful.

CHAPTER V

DISCUSSION

Content Development

In the first step of this project, literature was reviewed to determine appropriate social and emotional skills to measure in preschool-age children. Articles, books, and various behavior rating scale instruments were used to obtain information about early childhood development and corresponding observable behaviors. The initial list of 84 items was revised to reflect the findings of the literature review. For example, the initial list contained behaviors that were not developmentally appropriate, such as, “Can ignore other kids when they tease or call names”, and “Can stay calm when there is a problem or argument”. These skills are important to learn and may be developing in some 3-5 year olds, however developmental literature indicates that children in this age group are still developing impulse control and theory of mind, and likely would not be advanced enough to regulate their reactions as carefully as “ignoring” would require if they were being teased (Bronson, 2000).

The final protocol included 42 items within the five domains which were established based on the factors identified in the research processes to develop the original SEARS system: 1) Self-Regulation; 2) Social Competence; 3) Empathy; 4) Responsibility; and 5) Emotion Knowledge. These broad domains encompass skills necessary for social and emotional competence: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL as cited in Zins & Elias, 2007). Within each of these domains, items were developed to reflect the

characteristics and behaviors that appear to be important for success with peers, adults, academic learning, and long-term development.

Content Validation

Feedback provided from the expert panel suggested that overall, the items were clearly written, age-appropriate, free from cultural bias, and could be observed by a teacher. Nine items were revised based on expert panel member ratings. Of those items, six revisions reflected issues with item clarity, and were modified by merely altering semantics to include more specific language (e.g., changed from “Adjusts well **with** new teachers or caregivers” to: “Adjusts well **to** new teachers or caregivers”; changed from “initiates play easily” to “initiates play **with others** easily”).

Three of the items were altered to add or change major content. For example, “Takes responsibility for things” was rated as inappropriate due to lack of clarity and not being developmentally appropriate for children this young. Based on suggestions from panelists, the item was changed to form two different items, “Takes responsibility for **own actions/behavior when prompted**”, to account for dependence on adults to cue the child’s acknowledgement of his or her own actions, and “**Shows** responsibility for things **around him/her (e.g., toys, furniture, books)**” to account for responsibility for material goods. Feedback from the panel provided valuable insight as to how well teachers would be able to understand the items on the SEARS-Pre.

Exploratory Factor Analysis

To address research question three, a convenience sample of teachers completed the SEARS-Pre rating scale for five or more students in their classroom. This data was evaluated to determine the underlying factor structure of the SEARS-Pre for this sample.

The results of the factor analysis revealed three factors consisting of 27 items. Suggestions as to what the factors measure are provided based on the items that correlated with each factor. Factor one appears to be measuring traits and behaviors related to self-regulation and social competence. Factor two appears to be measuring traits and behaviors related to emotion knowledge and expression, and factor three appears to measure traits and behaviors related to empathy and responsibility.

Although three factors were identified through analyses, it is important to note that the first factor explains more of the latent construct (43%): social and emotional strengths and assets. Composed of 13 items, this robust factor includes items assessing multiple skill sets including emotion management, impulse control, and problem-solving. It was determined that these skills encompass traits and abilities required for both self-regulation and competently navigating social relationships. Perhaps the primary descriptor for this factor would be abilities related to self-regulation, since self-regulation and emotion management is a critical first step for behaviors related to social competence (e.g., taking turns and compromising with others, two of the items that correlated with this factor) (Bronson, 2000; Shonkoff & Phillips, 2000). Given that emotion regulation is important for many aspects of social and emotional functioning, it is not surprising that this factor explains a large portion of the variance for a scale measuring social and emotional assets.

This appears consistent with the literature on the importance of emotion regulation as a form of self-management (Denham, & Weissberg, 2004). Studies indicate that children entering kindergarten without skills related to emotion regulation are at significantly higher risk for peer rejection and low academic performance (McClelland,

Morrison, & Holmes, 2000). The more children engage in cooperative and socially appropriate behavior, the more they are liked and accepted by their peers (Newcomb, Bukowski, & Pattee, 1993). Behaviors associated with dysregulation or poor regulation, such as grabbing toys or yelling, are not acceptable in school contexts. Therefore, it seems likely that children who are able to manage extreme emotions, self-soothe, and express emotions in an appropriate manner may be more likely to solve problems and interact in a pleasant manner, which studies indicate results in greater peer acceptance (McKown et al., 2009).

Each of the remaining two factors explained somewhat less of the latent construct; Factor Two explained 37% and Factor Three explained 38% of the variance of the SEARS-Pre. The factor scores are highly correlated and may be better conceptualized as skill areas rather than definitive categories. Many of the domains measured by the SEARS-Pre are related enough to be considered a unified factor, though they may require separate skills. Literature suggests that resilience is a complex construct that includes many different aspects of social and emotional functioning (Shroeder & Gordon, 2002).

Factor Two included items related to emotion identification and expression, such as describing the emotions of self and others, and identifying reasons for feelings. This construct is similar to the hypothesized construct of emotion-management, but more specific to labeling and communicating emotions as opposed to managing behaviors. Several items included in Factor One are related to emotion identification and expression, such as responding to facial expressions and knowing when others are upset even when they say nothing. However, children are better able to control their emotions and

behavior, as well as problem solve ways to self manage, when they are able to interpret what is causing their heightened arousal (Bronson, 2000).

Factor Three appears to measure skills related to empathy and social maturity (e.g., “comforts other children when they are upset;” “likes doing things for others;” “other people see him/her as a leader”). Though closely related and somewhat dependent on emotional identification and interpersonal skills, empathy is distinct in that it refers to recognizing, understanding, and even vicariously experiencing the emotions of someone else (McKown et al., 2009). Empathy is critical for promoting prosocial behavior toward others and responding appropriately to the emotional needs of others (Eisenberg et al., 1995).

Internal Consistency Reliability

The obtained coefficient for the SEARS-Pre total was .97, and coefficients for all factors were above .90. Guidelines in the literature for interpreting internal consistency coefficients suggest that these reliability estimates reflect very strong internal consistency reliability for the SEARS-Pre interpretation (Salvia & Ysseldyke, 2007). High internal consistency means that each item on the SEARS-Pre is tapping into a common general construct given the high inter-item correlations.

High internal-consistency coefficients indicate stability of the items on the SEARS-Pre in measuring the latent variable, and internal-consistency reliability indicates that items rated on the SEARS-Pre are rated in ways that make sense based on the different constructs. It is important that the SEARS-Pre demonstrate reliability as a foundation for further psychometric analysis and interpretation (Salvia & Ysseldyke, 2007).

Group Comparisons

Sex

Results indicate that teachers rated females as having more strengths and resilience than males on all three factors and the total score. The effect sizes of the differences were medium to large, which indicates the differences have importance or meaning. Although the differences between boys and girls on SEARS-Pre scores were significant across all factor scores, the largest difference was related to Factor Three, the empathy factor.

These differences are reflected to some degree in recent research. For example, in a study of differences between female and male social emotional assets using a strength-based assessment system for 6-18 year olds, girls obtained significantly higher total scores based on parent and teacher ratings, as well as student self-reports (Romer, Ravitch, Tom, Merrell, & Wesley, 2011). Parents, teachers, and students all perceived girls as demonstrating more social and emotional strengths and knowledge of skills such as empathy and problem solving. These perceptions of gender differences were not impacted by the grade that students were in or the gender of the parent or teacher rating the student. (Romer, Ravitch, Tom, Merrell, & Wesley, 2011).

Sex differences were also indicated in a study of preschool age children's empathy for others' positive emotions in relation to concurrent and longitudinal positive social competence and empathy for others' negative emotions, based on laboratory observations as well as parent report. In this study, girls were rated as demonstrating more positive social competence and empathy for others' negative emotions than boys, but did not differ on measures of empathy for others' positive emotions (Sallquist, 2009).

More evidence is needed to explain patterns of risk and protective factors that may vary by gender and determine how this information can be used to inform interventions (Friedrich et al., 2010). In some cases, separate norms may be indicated for measurement systems designed to assess boys and girls.

Age

As evidenced by the data, teachers reported older preschool children as possessing more social emotional assets and resilience than their younger preschool classmates. This finding is not surprising, given that children are expected to develop coping skills with age. The phenomenon of age and developmental differences in children's social-emotional skills is well documented (Denham, & Weissberg, 2004).

However, there was no main effect for age, indicating that there was not a significant difference in scores between 3 and 5 year olds. This may be due to the instructions provided for the SEARS-Pre, which ask the teacher to, "consider each statement based on the child's development, rather than comparing the child to older peers." This statement was provided with the intent to establish sensitivity of the measure; due to the fact that children at this age are rapidly developing, and may not consistently demonstrate social-emotional skills consistently, a 3-year-old's social-emotional skills may be overlooked or underrated if compared to those of a 4-year old. To account for this, teachers were directed to adjust for age when rating students, and this "age-adjustment" may contribute to lack of significance for age effects. Results also indicate that gender and age do not interact, that is, that the effect of one of these variables is not dependent on the other.

Validity

According to the *Standards for Educational and Psychological Testing* (American Educational Research Association et al., 1999), the validity of an assessment is in part demonstrated by groups that were expected to differ from each other based on theory actually having been rated differently in a meaningful way. Validity evidence for the SEARS-Pre was provided by showing theoretically consistent sensitivity to group differences, based on gender and age.

Limitations

The nature and size of the sample obtained in this preliminary study may limit the generalizability of the results. All data were collected in Eugene, Oregon. Ideally, a more representative sample of ratings from various areas of the United States would have been used; however, a geographically stratified recruitment plan was outside of the scope of this study. Additionally, the sample size was very small compared to guidelines for performing exploratory factor analyses.

Teachers rated five students in their classrooms, which introduces some potential lack of independence and reporter bias in the data, but that threat is minimal given that each teacher filled out relatively few questionnaires. It is possible that individual teachers approached the rating task with differing interpretations of the scale or the items for the students within their classroom. This type of systematic clustering may have influenced the associations we explored. Since these differences were not analyzed in the course of this study, the variances and covariances may be overestimations of the relations between the variables. Systematic clustering is considered a potential source of measurement error that can affect the dependability of measures (Shavelson & Webb, 2005); however due to

the small sample size, conducting analyses that look at reporting biases across teacher performance was not indicated.

Additionally, all assessments were administered in the spring. Consequently, teachers may have rated students differently than they would have at other times of the year. For example, teachers may have rated students' social-emotional skills as being high in comparison to that student's skills at the beginning of the year, rather than in comparison to a typical same-aged peer. Future studies should include data collection at varied points throughout the school-year to identify possible differences in ratings.

Another limitation was the negatively skewed data for Factor two. A preliminary transformation was conducted to minimize skew, however this did not substantially change the results in subsequent analyses. Future studies incorporating larger samples should ensure normal distribution, or other transformations could be performed to determine the best way to minimize skew.

Future Research

Teacher ratings of student behavior are an important source of information, however they are not sufficient for comprehensive assessment on their own. Future research with the SEARS-Pre that incorporates parent ratings will help identify additional sources of information and the relationship across multiple raters. Additionally, although an EFA was indicated in this study given that the constructs for this measure are in their early stages of development, future studies should further investigate different factor models using a confirmatory factor analytic approach.

Scores on the SEARS-Pre should be studied in comparison to scores on other similar measures to provide convergent evidence for the validity of this assessment tool

(The *Standards for Educational and Psychological Testing*; AERA, APA, & NCME, 1999). To continue the process of validating the SEARS assessment system, longitudinal test-retest reliability analyses should be conducted in a study that spans several months and uses the same test subjects to evaluate patterns in scores over time. Finally, in addition to evaluating the temporal stability of the SEARS-Pre, more research concerning sensitivity to intervention effects is needed.

Since assessment provides the foundation for intervention, further validation of the SEARS-Pre should involve using the SEARS-Pre to measure social-emotional functioning of young children before and after intervention.

Conclusion

In spite of these limitations, this study makes an important contribution to our initial understanding of the social and emotional constructs and descriptors that should be measured in preschool-aged children. Findings from developmental, school, and clinical psychological literature indicate that students with greater self-regulation are more likely to develop positive relationships with caregivers, teachers, and peers (Rothbart & Bates, 2006). This research suggests that cognitive and emotional systems are interconnected, and that promoting social-emotional skills can enhance academic achievement (Blair & Razza, 2007).

APPENDIX A

SOCIAL-EMOTIONAL ASSETS AND RESILIENCY SCALES FOR PRESCHOOL: DEVELOPMENT STEPS AND DOCUMENTATION

STEP 1: SEARS-Pre development team identified relevant domains and generated items from 6 social-emotional assessment tools (84 items, total)

STEP 2: Principal Investigator (PI) conducted extensive literature review, examined evaluations of 3 other social-emotional assessment tools on social-emotional competence for preschool-age children; added 16 items and adapted 21 of the existing items (100 items, total)

STEP 3: Deleted 59 items to reduce duplication and balance content coverage (41 items, total)

STEP 4: Organized items by common types of assets; revised domain names.

STEP 5: Content validation panel process (10 professionals) and item revision (42 items, total)

STEP 1.

A preliminary SEARS-Pre development team consisting of three doctoral candidates (N. Kathryn Ravitch, Bradley Cohn, and Sarah Felver) identified relevant domains and items from original SEARS (ages 6-18), and adapted items from 6 other social-emotional assessment measures (84 items total)

Domains

Friendship

Empathy

Interpersonal

Social Support

Problem Solving

Emotional Competence

Social Maturity

Self-Management

Social Independence

Social-Emotional Resilience

Items by Measure (84 items):

SEARS (26 items)

1. Makes friends easily
2. Is accepted and liked by other kids
3. Has at least one good friend
4. Tries to understand how friends feel when they are angry, upset, or sad
5. Cares what happens to other people
6. Knows when people are upset, even when they say nothing
7. Helps other people when they need it
8. Is good at starting a conversation
9. Compliments other kids
10. Can disagree with other people without fighting or arguing
11. Is good at solving problems
12. Helps others solve problems
13. Can use different ways of solving problems
14. Is good at identifying and understanding feelings
15. Can ignore other kids when they tease or call names
16. Can stay calm when there is a problem or argument
17. Can think before he/she acts

18. Other people see him/her as a leader
19. Can make good decisions
20. Can take responsibility for things
21. Can stand up for self when he/she needs to
22. When life is hard, doesn't let things get to him/her
23. Can handle problems that really bother other children
24. Even when things don't go well for him/her, child is okay
25. Asks others for help when she/he needs it.
26. Likes doing things for other people

PKBS (18 items)

27. Is sensitive to adult problems ("Are you sad?")
28. Tries to understand another child's behavior ("Why are you crying?")
29. Attempts new tasks before asking for help
30. Adapts well to different environments
31. Works or plays independently
32. Is able to separate from parent without extreme distress
33. Plays with several different children
34. Is invited by other children to play
35. Cleans up his/her messes when asked
36. Responds appropriately when corrected
37. Uses free time in an acceptable way
38. Sits and listens when stories are being read
39. Follows rules
40. Follows instructions from adults
41. Takes turns with other children

- 42. Gives in or compromises with peers when appropriate
- 43. Seeks comfort from an adult when hurt
- 44. Comforts other children who are upset

BASC-2 (11 items)

- 45. Congratulates others when good things happen to them
- 46. Adjusts well to changes in routine
- 47. Pays attention
- 48. Is easily soothed when angry
- 49. Is able to describe feelings accurately
- 50. Provides full name when asked
- 51. Listens carefully
- 52. Quickly joins group activities
- 53. Adjusts well to new teachers or caregivers
- 54. Is clear when telling about personal experiences
- 55. Says “please” and “thank you”

SEAM (15 items)

- 56. Calls friends by name
- 57. Can describe emotions of others (e.g., “you’re tired” when teacher yawns)
- 58. Smiles and laughs when playing with peers
- 59. Demonstrates a range of positive and negative emotions using a variety of strategies
- 60. Identifies feelings and reasons for having them (e.g., “I am mad because I didn’t get a turn”)
- 61. Remains calm in disappointing situations
- 62. Can calm self when upset within 5 minutes
- 63. Moves from one activity to another without problems

- 64. Regulates activity level to match setting with few reminders
- 65. Stays with or returns to challenging activities
- 66. Finds another activity after conflict with peer
- 67. Participates in group activities
- 68. Knows personal information (e.g., name, age, and gender)
- 69. Shows off work, takes pride in accomplishments
- 70. Smiles at other children

SSRS (9 items)

- 71. Controls temper when arguing with other children
- 72. Controls temper in conflict situations with adults
- 73. Responds appropriately when hit or pushed by other children
- 74. Accepts peers' ideas for group activities/games
- 75. Appropriately questions rules that may be unfair
- 76. Follows rules when playing games with others
- 77. Helps with household tasks without being asked
- 78. Joins ongoing activity or group without being told to do so
- 79. Asks permission before using another person's property

SDQ (3 items)

- 80. Considerate of other peoples feelings
- 81. Often offers to help others
- 82. Responds to other people's facial expressions

Created (2 items)

- 83. Respects others
- 84. Uses words to solve problems

STEP 2.

The PI conducted an extensive literature review, examined evaluations of three other social-emotional assessment tools on social-emotional competence for preschool-age children, added 16 items, and adapted 21 of the existing items (100 items total).

Added (16 items):

ASQ-SE (7 items)

1. Uses words to tell you what he/she wants or needs
2. Settles down after periods of exciting activity
3. Stays with activities he/she enjoys for at least 15 minutes (not including watching television)
4. Takes turns and shares with other children
5. Uses words to describe his/her feelings and the feelings of others, such as, “I’m happy”, “I don’t like that”, or “She’s sad”
6. Shows concern for others peoples’ feelings, for example, does he/she look sad when someone is hurt?
7. Looks at you when you talk to him/her

DECA (4 items)

8. Show affection for familiar adults
9. Seek help from children/adults when necessary
10. Control her/his anger
11. Calm herself/himself down when upset

PreBERS (1 item)

12. Is kind toward others

Created (4 items)

13. Says nice things to others when they have done something well
14. Shares toys and other belongings
15. Tells adults how he/she feels
16. Uses words when angry rather than hitting

Adapted/Altered Items (21 items; alterations in bold):

1. Tries to understand how friends feel when they are angry, upset, or sad (“**Why are you crying?**”)
2. Is good at starting ~~a~~ conversation **with other children**
3. ~~Seek~~ **Asks for** help ~~from children/adults~~ when necessary
4. Is kind **toward** others
5. Is good at identifying ~~and understanding~~ feelings
6. Likes doing things for others **people**
7. ~~Gives in or~~ Compromises with **peers other children** when appropriate
8. ~~Can~~ Describes basic emotions of **others (happy, sad, surprise, mad)**... (e.g., “**you’re happy**” when teacher smiles) ~~(e.g., “you’re tired” when teacher yawns)~~
9. Smiles and laughs when playing with **peers other children**
10. **Is able to distract him or herself**/finds another activity after conflict with peers
11. Identifies ~~feelings and~~ reasons for **feelings having them** (e.g., “**I am sad because I lost my toy**”) ~~“I am mad because I didn’t get a turn”~~)
12. ~~Shows concern for~~ Feels bad when others ~~peoples’~~ **have their feelings hurt, for example, does he/she look sad when someone is hurt?**
13. ~~Can use~~ Tries different ways **of solving** to solve problems
14. Calms **herself/himself** down ~~when~~ **after being** upset
15. Remains calm in disappointing situations (e.g., **Can think before he/she acts**)

16. Asks permission before ~~using another person's~~ **touching others'** property
17. Is clear when ~~telling~~ **talking** about personal experiences
18. Responds **appropriately** to other people's facial expressions
19. Is accepted and liked by other ~~kids~~ **children**
20. ~~Can~~ Stands up for **him or herself** ~~when he/she need to~~ **(e.g., if someone tries to take a belonging or does not follow through on a promise)**
21. Takes turns ~~and shares with other children~~

STEP 3.

The PI deleted 59 items to reduce duplication and balance content coverage (41 items total).

Deleted (59 items):

1. Has at least one good friend
2. Compliments other kids
3. Can handle problems that really bother other kids
4. Other children like to play with him/her
5. Cares what happens to other people
6. Is good at solving problems
7. Can ignore other kids when they tease or call names
8. Can stay calm when there is a problem or argument
9. Can think before he/she acts
10. Is sensitive to adult problems ("Are you sad?")
11. Tries to understand another child's behavior ("Why are you crying?")
12. Attempts new tasks before asking for help
13. Adapts well to different environments
14. Works or plays independently

15. Is able to separate from parent without extreme distress
16. Plays with several different children
17. Is invited by other children to play
18. Cleans up his/her messes when asked
19. Responds appropriately when corrected
20. Uses free time in an acceptable way
21. Sits and listens when stories are being read
22. Follows rules
23. Follows instructions from adults
24. Takes turns with other children
25. Seeks comfort from an adult when hurt
26. Congratulates others when good things happen to them
27. Adjusts well to changes in routine
28. Pays attention
29. Is easily soothed when angry
30. Is able to describe feelings accurately
31. Provides full name when asked
32. Listens carefully
33. Quickly joins group activities
34. Calls friends by name
35. Demonstrates a range of positive and negative emotions using a variety of strategies
36. Can calm self when upset within 5 minutes
37. Moves from one activity to another without problems
38. Regulates activity level to match setting with few reminders
39. Stays with or returns to challenging activities

40. Participates in group activities
41. Knows personal information (e.g., name, age, and gender)
42. Shows off work, takes pride in accomplishments
43. Controls temper when arguing with other children
44. Controls temper in conflict situations with adults
45. Responds appropriately when hit or pushed by other children
46. Accepts peers' ideas for group activities/games
47. Appropriately questions rules that may be unfair
48. Follows rules when playing games with others
49. Helps with household tasks without being asked
50. Joins ongoing activity or group without being told to do so
51. Considerate of other peoples feelings
52. Often offers to help others
53. Uses words to tell you what he/she wants or needs
54. Settles down after periods of exciting activity
55. Stays with activities he/she enjoys for at least 15 minutes (not including watching television)
56. Uses words to describe his/her feelings and the feelings of others, such as, "I'm happy", "I don't like that", or "She's sad"
57. Show affection for familiar adults
58. Control her/his anger
59. Even when things don't go well for him/her, child is okay

STEP 4: The PI organized items by common types of assets and revised domain names.

Self-Regulation

1. Calms down easily after being upset
2. Smiles & laughs when playing with other children
3. Uses words when angry rather than hitting
4. Remains calm in disappointing situations (e.g., Can think before he/she acts)
5. When life is hard, doesn't let things get to him/her
6. Is able to distract him or herself/find another activity after conflict with peers
7. Tries different ways to solve problems
8. Uses words to solve problems
9. Adjusts well with new teachers or caregivers
10. Takes turns

Social Competence

11. Makes friends easily
12. Is accepted and liked by other children
13. Is good at starting conversation with other children
14. Disagrees with other people without fighting or arguing
15. Initiates play easily
16. Shares toys and other belongings
17. Likes doing things for others
18. Says "please" and "thank you"

19. Says nice things to others when they have done something well
20. Smiles at other children
21. Looks at you when you talk to him/her
22. Compromises with other children when appropriate

Emotion Knowledge

23. Tells adults how he/she feels
24. Is good at identifying feelings
25. Describes basic emotions of others (happy, sad, surprise, mad)...(e.g., “you’re happy” when teacher smiles)
26. Knows when people are upset, even when they say nothing
27. Identifies reasons for feelings (e.g., “I am sad because I lost my toy”)

Empathy

28. Comforts other children who are upset
29. Tries to understand how others feel when they are angry, upset, or sad (“Why are you crying?”)
30. Feels bad when other people have their feelings hurt
31. Is kind to others
32. Responds appropriately to other people’s facial expressions
33. Helps other people when they need it
34. Helps others solve problems

Responsibility

- 35. Other people see him/her as a leader
- 36. Makes good choices
- 37. Takes responsibility for things
- 38. Is clear when talking about personal experiences
- 39. Asks permission before touching others' property
- 40. Stands up for him or herself (e.g., if someone tries to take a belonging or does not follow through on a promise)
- 41. Asks for help when necessary

Final Domains:

- **Self-Regulation** (Includes items related to Self-Management, some items related to Emotional Competence, some items related to Problem Solving, some items related to Social Independence)
- **Social Competence** (Includes items related to Friendship and Interpersonal Skills)
- **Emotion Knowledge** (Includes some items related to Emotional Competence)
- **Empathy** (Same construct)
- **Responsibility** (Includes some items related to Social Independence)
- Deleted Social Support and Social Maturity

STEP FIVE: Content validation panel process (10 professionals) and item revision. The Principal Investigator (N. Kathryn Ravitch) reworded and organized items based on panel feedback

Items	Alteration	Reason/Rating
2. Says nice things to	Says nice things to others or	Multiple comments regarding

others when they have done something well	gestures to indicate when they have done something well (e.g., claps, high-5, says “wow”, “good”, etc.)	clarity
10. Adjusts well with new teachers or caregivers	Adjusts well to new teachers or caregivers	Multiple comments regarding clarity
14. Takes responsibility for things	Split into two items: Takes responsibility for own actions/behavior when prompted And Shows responsibility for things around him/her (e.g., toys, furniture, books)	Rated <i>Inappropriate</i> due to Age and Clarity
17. Is clear when talking about personal experiences	Uses clear communication when describing events (e.g., describes things that have happened in a manner that allows peers and adults to understand the main idea, using words, gestures, etc.)	Rated <i>Inappropriate</i> due to Age and <i>Borderline</i> <i>Appropriate</i> due to Clarity
19. Identifies reasons for feelings (e.g., “I	Identifies reasons for own feelings (e.g., “I am sad	Multiple comments regarding clarity

am sad because I lost my toy”)	because I lost my toy”)	
25. When life is hard, doesn't let things get to him/her	In general , when life is hard, doesn't let things get to him/her	Rated <i>Inappropriate</i> due to Age, Cultural Bias, Teacher Judgment, and Clarity
27 Feels bad when other people have their feelings hurt	Shows concern when other people have their feelings hurt	Rated <i>Inappropriate</i> due to Clarity
33. Initiates play easily	Initiates play with others easily	Rated <i>Inappropriate</i> due to Clarity
36. Is kind to others	No change- intentionally general	Rated <i>Inappropriate</i> due to Clarity
38. Makes good choices	No change- intentionally general	Rated <i>Inappropriate</i> due to Clarity
39. Knows when people are upset, even when they say nothing	In general , knows when people are upset, even when they say nothing	Rated <i>Inappropriate</i> due to Teacher Judgment and Clarity

APPENDIX B

LITERATURE REVIEW SOURCE LIST FOR ITEM DEVELOPMENT

- Bronson, M. B. (2000). *Self Regulation in Early Childhood: Nature and Nurture*. New York: Guilford.
- Cooper, J.L., Masi, R., Vick, J. (2009). Social-emotional development in early childhood: What every policymaker should know. National Center for Children in Poverty report. Mailman School of Public Health, Columbia University.
- Copple, C. (2003). Fostering young children's representation, planning, and reflection: A focus in three current early childhood models. *Applied Developmental Psychology*, 24, 763-771.
- Davies, D. (2010). *Child Development: A practitioner's guide*, 3rd edition. The Guilford Press, London.
- Denham, S. A. (2003). Social and emotional learning in early childhood. In T. P. Gullotta & M. Bloom (Eds.), *The encyclopedia of primary prevention and health promotion*. New York: Kluwer Academic/Plenum Publishers.
- Denham, S. A. , & Weissberg, R. P. (2004). Social-emotional learning in early childhood: What we know and where to go from here. In E. Chesebrough, P. King, T. P. Gullota, & M. Bloom (Eds.), *A blueprint for the promotion of prosocial behavior in early childhood* (pp. 13-50). New York: Kluwer Academic/Plenum Publishers.
- Dunn, J. (Ed.) (1995). *Connections between emotion and understanding in development*. Hillsdale, NJ: Erlbaum.

- Eisenberg, N., & Fabes, R. (1992). Emotion, regulation and the development of social competence. In M. Clark (Ed.), *Review of personality and social psychology*. (Vol. 14, pp. 119-150). Newbury Park, CA: Sage.
- Eisenberg N, Fabes R. A., Murphy B., Maszk P., Smith M., Karbon M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development*, 66, 1360–1384.
- Eisenberg, N., Fabes, R. A., Spinrad, T. L. (2006). Prosocial development. In: W. Damon & N. Eisenberg (Eds.), *The handbook of child psychology: Vol. 3. Social, emotional, and personality development*. (6th ed., pp 646-718). New York: Wiley.
- Epstein, A. S. (2009). *Me, you, us: Social-emotional learning in preschool*. Ypsilanti, MI: HighScope Press.
- Epstein, M. H., & Synhorst, L. (2009). *Preschool Behavioral and Emotional Rating Scale*. Austin, TX: PRO-ED.
- Goodman, R. (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry*, 40, 791-801.
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System*. Circle Pines, MN: American Guidance Service.
- Kochanska, G., Aksan, N., Penney, S. J., & Doobay, A. F. (2007). Early positive emotionality as a heterogeneous trait: Implications for children's self-regulation. *Journal of Personality and Social Psychology*, 93, 1054–1066.
- LeBuffe, P. A., & Naglieri, J. A. (1999). *The Devereux Early Childhood Assessment*. Lewisville, NC: Kaplan Press.

- Lengua, L. J., Long, A. C. (2002). The role of emotionality and self-regulation in the appraisal-coping process: Tests of direct and moderating effects. *Applied Developmental Psychology, 23*, 471–493.
- McKown, C., Gumbinar, L. M., Russo, N. M., & Lipton, M. (2009). Social-emotional learning skill, self-regulation, and social competence in typically developing and clinic-referred children. *Journal of Clinical Child & Adolescent Psychology, 38*(6), 858–871.
- Merrell, K. W. (2002). *Preschool and Kindergarten Behavior Scales* (2nd ed.). Austin, TX: PRO-ED.
- Merrell, K. W. (2008). *Behavioral, social, and emotional assessment of children and adolescents* (3rd ed.). Mahwah, NJ: Erlbaum.
- Merrell, K.W. (2011). *Social emotional assets and resilience scales (SEARS): Professional Manual*. Lutz, FL: Psychological Assessment Resources.
- Nelson, K. (1996). *Language in cognitive development: The emergence of the mediated mind*. New York: Cambridge University Press.
- Piaget, J. (1952). *The origins of intelligence in children*. New York: International Universities Press.
- Reynolds, C. R., & Kamphaus, R. W. (2004). *BASC-2: Behavior assessment system for children, second edition manual*. Circle Pines, MN: American Guidance Service.
- Roberts, W. & Strayer, J. (1996). Empathy, emotional expressiveness, and prosocial behavior. *Child Development, 67*, 449–470.

- Sallquist, J., Eisenberg, N., Spinrad, T. L., Eggum, N. D., Gaertner, B. M. (2009).
Assessment of preschoolers' positive empathy: Concurrent and longitudinal
relations with positive emotion, social competence, and sympathy. *Journal of
Positive Psychology, 4*(3), 223-233.
- Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science
of early childhood development*. Washington, DC: National Academy Press.
- Squires, J., & Bricker, D. (2007). *An activity-based approach to developing young
children's social and emotional competence*. Baltimore: Paul Brookes.
- Squires, J., Bricker, D. & Twombly, E. (2002). *Ages and Stages Questionnaires: Social-
Emotional: A parent-completed child-monitoring system for social-emotional
behaviors*. Baltimore: Paul Brookes.
- Vygotsky, L. S. (1977). Play and its role in the mental development of the child. In M.
Cole (Ed.), *Soviet developmental psychology*. White Plains, NY: M. E. Sharpe.
- Zins, J. E., & Elias, M. J. (2007). Social and emotional learning: Promoting the
development of all students. *Journal of Educational and Psychological
Consultation, 17*, 233-255.

APPENDIX C

CONTENT VALIDATION PANEL FEEDBACK FORM

Social-Emotional Assets and Resilience Scale for (SEARS-Pre) Feedback

Thank you for taking the time to provide feedback about the items developed for the SEARS-Pre. Please note that the following survey has been developed to collect your feedback in a systematic way- it is not the form that will be used to rate students. To view the SEARS-Pre prototype, please refer to the document attached to my email.

Please read each of the following items and rate whether the item is: **Appropriate (1), Borderline appropriate (2), or Not appropriate (3)**, in the following areas:

- Age-Appropriate: Item represents a developmentally appropriate skill for children age 3-5 years to BEGIN to exhibit.
- Culture/Gender Bias: Item is described in a manner that appears free from culture or gender bias.
- Teacher Judgment: Item represents a skill that teachers would be able to evaluate in preschool students.
- Clear/Concise: Item is written in a manner that is easy to read and understand, and describes the skill succinctly.
- Other Comment: Please list additional comments, questions, or alternate wording suggestions (scroll all the way to the right).

	Age-Appropriate			Culture/Gender Bias			Teacher Judgment			Clear/Concise			Other Comment? Describe:
	1	2	3	1	2	3	1	2	3	1	2	3	
1. Smiles & laughs when playing with other children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
2. Says nice things to others when they have done something well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
3. Other people see him/her as a leader	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4. Is good at starting conversation with other children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
5. Helps other people when they need it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
6. Makes friends easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
7. Disagrees with other people without fighting or arguing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
8. Responds appropriately to other people's facial expressions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
9. Is accepted and liked by other children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
10. Adjusts well with new teachers or caregivers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
11. Looks at you when you talk to him/her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
12. Smiles at other children	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
13. Remains calm in disappointing situations (e.g., can think before he/she acts)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
14. Takes responsibility for things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
15. Uses words to solve problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
16. Stands up him or herself (e.g., If someone tries to take a belonging or does not follow through on a promise)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
17. Is clear when talking about personal experiences	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
18. Describes basic emotions (i.e., happy, sad, surprise, mad) of others (e.g., "you're happy" when teacher smiles)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
19. Identifies reasons for feelings (e.g., "I am sad because I lost my toy")	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
20. Says "please" and "thank you"	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
21. Is able to distract him or herself/find another activity after conflict with peers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
22. Uses words when angry rather than hitting	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
23. Helps others solve problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
24. Compromises with other children when appropriate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
25. When life is hard, doesn't let things get to him/her	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
26. Comforts other children who are upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
27. Feels bad when other people have their feelings hurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
28. Likes doing things for others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
29. Calms down easily after being upset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
30. Is good at identifying feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
31. Takes turns	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

32. Initiates play easily	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Asks permission before touching others' property	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Tells adults how he/she feels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. Is kind to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. Shares toys and other belongings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. Makes good choices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Knows when people are upset, even when they say nothing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. Asks for help when necessary	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Tries to understand how others feel when they are angry, upset, or sad (e.g., "Why are you crying?")	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
41. Tries different ways to solve problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 Are there any other items that you think would be important to include?

Q5 Please rate the overall usefulness of the test for evaluating social-emotional skills in preschool-age children:

- Very Useful
- Somewhat Useful
- Not Useful

Q6 How knowledgeable do you consider yourself to be in the area of social and emotional development in young children?

- Very knowledgeable
- Fairly knowledgeable
- Somewhat knowledgeable
- Not knowledgeable

Q7 How knowledgeable do you consider yourself to be in the area of assessment development?

- Very knowledgeable
- Fairly knowledgeable
- Somewhat knowledgeable
- Not knowledgeable

Q8 Please describe your current profession:

Q9 Approximately how many years of experience do you have working with preschool-age children?

- Less than 1 year
- 1-2 years
- 3-4 years
- 5-6 years
- Over 6 years

Q10 What is your current level of education?

- Master's Degree
- Doctoral Degree
- Educational Specialist Degree
- Doctor of Medicine
- Advanced doctoral training (over 3 years in a doctoral program)

APPENDIX D

SAMPLE LETTER AND CONSENT FORM FOR PRESCHOOL PROGRAM

DIRECTORS



UNIVERSITY OF OREGON

May 10, 2012

Dear Preschool Director:

My name is Katie Ravitch and I am a doctoral candidate in the School Psychology Program at the University of Oregon. My dissertation research involves developing a measure called the Social Emotional Assets and Resilience Scale for Preschool (SEARS-Pre). The SEARS-Pre is a teacher reported social-emotional assessment for children age 3-5 years. My goal in developing this measure is to create an assessment that can be used to examine a wide range of social and emotional skills in young children, and aid in identifying and enhancing skill development at an early age. This study has been approved by the University of Oregon's Office for Protection of Human Subjects and has full Institutional Review Board approval.

I am recruiting preschool teachers who may be interested in participating in my study. Teacher participation is voluntary and completely anonymous. Participating teachers will be asked to complete a short demographics questionnaire and the SEARS- Pre assessment. The SEARS-Pre takes about 10-15 minutes to complete, and includes 42 items, such as "Cooperates with other children," "Attempts new tasks before asking for help" and "Feels bad when other people have their feelings hurt." This survey is anonymous such that the names or other identifying information of participating teachers or their students will not be documented.

There is minimal risk associated with this study. Asking teachers to respond to questions about their students' skills could possibly increase awareness of the child's social and emotional strengths and affect the teacher's perception of the child or behavior toward the child. It is thought that this increased awareness of children's social and emotional strengths may have a positive effect on student-teacher relationships. Benefits of your school's participation in this study include your assistance in providing valuable information to help create a new social-emotional behavior rating scale for preschool-age children. Teachers who participate will receive a \$10 gift card for each survey they complete as a small token of appreciation. We are asking that they complete five surveys, if possible.

To maintain the anonymity of participating teachers, we will provide you with a packet of study materials for each teacher, and ask that you distribute the packets to your teachers who provide early childhood education and care for 3, 4, and 5 year-old typically developing children. Children who receive early intervention or early childhood special education through an Individualized Family Service Plan (IFSP) from Early Childhood CARES are not being targeted at this stage in this study. Upon receiving the packets, teachers may choose to participate in the study or choose not to participate. We ask that teachers who choose to participate in the study complete the questionnaires on their own time (outside of their school day). Participating teachers

will be asked to return their surveys directly to me within two weeks, and will be provided with a preaddressed, postage-paid return envelope. The data that we gather will be analyzed to validate the assessment, and will be kept securely in a locked file cabinet and secure computer database.

If you agree to distribute materials to your teachers, please read, sign, and return the attached consent form to indicate that (a) you agree to participate; (b) you approve the consent process that was approved by the University of Oregon's Institutional Review Board; and (c) you have received and reviewed the packet materials and find them acceptable. If you have any questions, please email (nravitch@uoregon.edu), or call me (541-357-8026). My faculty advisor, Dr. Laura Lee McIntyre, is also available to answer any questions you may have. She can be reached through email at llmcinty@uoregon.edu or phone at 541-346-7452. Thank you again, we look forward to working with you.

Sincerely,

A handwritten signature in cursive script, appearing to read "N. Kathryn Ravitch".

N. Kathryn Ravitch
School Psychology Doctoral Candidate
University of Oregon

University of Oregon School Psychology Program
Informed Consent for Participation in Development of the Social-Emotional Assets
and Resiliency Scale for Preschool (SEARS-PRE)
Investigator: N. Kathryn Ravitch
Adult Consent Form

Introduction

You are being asked to be in a research study focused on the development of a strength-based assessment of social and emotional skills in preschool-age children.

We ask that you read this form and ask any questions that you may have before agreeing to be in the study.

Purpose of Study:

The purpose of this study is to develop a measure called the Social-Emotional Assets and Resiliency Scale for Preschool (SEARS-Pre). The SEARS-Pre is a social-emotional assessment for children age 3-5 years, designed to be completed by teachers.

Program directors from early childhood education programs in Lane County and surrounding areas will be invited to distribute materials to teachers in their programs for this study. Early childhood education programs will be included if they provide services for typically developing students between the ages of 3-5 years. Typically developing will be defined as not currently receiving Early Intervention or Early Childhood Special Education services through an Individualized Family Service Plan.

Description of the Study Procedures:

If you agree to be in this study, we would ask you to disseminate packets of study materials to teachers who provide early education and care for 3, 4, and 5 year-old typically developing children. The packets (attached) include an invitation cover letter, information and consent letter, SEARS-pre prototype assessment, postage-paid return envelope, and \$10 gift cards. Maintaining the anonymity of prospective research participants (teachers) is important. Thus, we ask that you disseminate the materials packets to teachers so that we will not have their contact information or any identifying information. Dissemination of materials packets to teachers does not obligate them to participate. Teachers have the choice to participate or not in this research.

Risks/Discomforts of Being in the Study:

There are no known or anticipated risks for your participation in this study.

Benefits of Being in the Study:

Participating teachers may feel good about contributing to a research study investigating social-emotional assets of their preschool students. Participants may have a positive experience in that the information they contribute is potentially helping to create a new social-emotional assessment for preschool age children. Additionally, as a result of responding to the questions on the survey, teachers may have an increased awareness of students' social and emotional strengths. This awareness may potentially influence their

interaction patterns with their students resulting in more positive student-teacher relationships and interactions.

The social-emotional assessment for preschool-age children may be a valuable tool for teachers to use to identify social and emotional strengths and assets, and enhance social and emotional learning. The social and emotional competence of young children has been found to be related to factors such as teacher-student relationships, peer interactions, academic learning, and resilience over time. Therefore, this assessment tool may provide information that can be used to identify students' strengths and areas for growth, and promote the development of positive behavioral goals for young children. In addition, this information may be important to gather generalizable knowledge surrounding the assessment of social-emotional strengths and assets in young children.

Payments:

Your school will receive a \$25 honorarium for academic supplies as a thank-you for your agreement to disseminate packets to teachers. Teachers will receive a \$10 gift card for each survey they complete.

Costs:

There is no cost to you to participate in this research study.

Confidentiality:

The records of this study will be kept private and we will not be asking for identifying information from participants. Thus, their participation (and their identity) will be anonymous. In any sort of report we may publish, we will not include any information that will make it possible to identify a participant. Research records will be kept in a locked file. All electronic information will be coded and secured using a password-protected file. Access to the records will be limited to the researchers; however, please note that the Institutional Review Board and internal University of Oregon auditors may review the research records.

Voluntary Participation/Withdrawal:

Your participation involves disseminating materials packets to teachers. Your participation is voluntary. If you choose not to participate, it will not affect your current or future relations with the University. You are free to withdraw at any time, for whatever reason. There is no penalty or loss of benefits for not taking part or for stopping your participation. You will be provided with any significant new findings that develop during the course of the research that may make you decide that you want to stop participating.

Dismissal From the Study:

The investigator may withdraw you from the study at any time for the following reasons: (1) withdrawal is in your best interests (e.g. side effects or distress have resulted), (2) you have failed to comply with the study requirements, or (3) the study sponsor decides to terminate the study.

Contacts and Questions:

The researchers conducting this study are N. Kathryn Ravitch, doctoral candidate in School Psychology, and Dr. Laura Lee McIntyre, Faculty Advisor and Associate Professor of School Psychology. For questions or more information concerning this research you may contact N. Kathryn Ravitch (541-357-8026; e-mail nravitch@uoregon.edu) or Laura Lee McIntyre (541-346-7452; e-mail llmcinty@uoregon.edu).

If you believe you may have suffered a research related injury, contact N. Kathryn Ravitch at (541) 357-8026 who will give you further instructions. If you have any questions about your rights as a research subject, you may contact: the Office for Protection of Human Subjects, University of Oregon at (541-346-2510) or human_subjects@uoregon.edu.

Copy of Consent Form:

You will be given a copy of this form to keep for your records and future reference.

Statement of Consent:

I have read (or have had read to me) the contents of this consent form and have been encouraged to ask questions. I have received answers to my questions. I give my consent to participate in this study. I have received (or will receive) a copy of this form.

Study Participant (Print Name)

Participant or Legal Representative Signature:

Date

APPENDIX E

SAMPLE TEACHER PACKET



UNIVERSITY OF OREGON

May 14, 2012

Dear Teacher:

You are invited to participate in a research project aiming to develop a new assessment called the Social-Emotional Assets and Resiliency Scale for Preschool (SEARS-Pre). The SEARS-Pre is a social-emotional assessment for children age 3-5 years, to be completed by teachers. Completion of the SEARS-Pre takes approximately 10-15 minutes per child. For this study, we are asking teachers to complete a SEARS-Pre questionnaire for five children in their classroom (estimated time to completion is 1 hour).

The project is being conducted by me, Katie Ravitch, a doctoral student from the School Psychology Program at the University of Oregon and supervised by my advisor, Dr. Laura Lee McIntyre. The results from this project will be used to complete my dissertation project focusing on developing a scale that will provide a way for educators and researchers to examine the social and emotional strengths of young children. This information may then be used to understand how we can better support social and emotional skill development and create positive behavioral goals.

Your participation is voluntary and anonymous. The information you provide in these ratings will not personally identify you or your students in any way. Benefits of your participation in this study include your assistance in providing valuable information to help create a social-emotional rating scale for use by teachers, and possibly increased awareness of students' social and emotional skills. As special thanks for voluntarily helping out with this project, a \$10 gift card is attached to each questionnaire, for a total of \$50 if you are able to complete all five.

Instructions:

To participate in this project, please read the following consent for participation information. Then, if you agree to the terms of the study, complete the SEARS-Pre questionnaires. If you do not wish to participate in this project, please use the enclosed self-addressed, stamped manila envelope to return all materials.

If you choose to participate, please complete the following steps:

1) Complete a questionnaire for five randomly selected, 3, 4, or 5 year-old typically developing children in your classroom.

Children who receive early intervention or early childhood special education through an Individualized Family Service Plan (IFSP) from Early Childhood CARES are not being targeted at this stage in this study.

2) Please remove and keep the gift card for each questionnaire you complete.

3) Return the completed questionnaires in the enclosed self-addressed, stamped manila envelope within two weeks of the date you receive the materials.

Please also return any unused questionnaires, along with the attached gift cards, in the same envelope.

Please feel free to contact me by email at nravitch@uoregon.edu or phone at 541-357-8026 if you have questions. My faculty advisor, Dr. Laura Lee McIntyre, is also available to answer any questions you may have. She can be reached through email at llmcinty@uoregon.edu or phone at 541-346-7452.

Thank you in advance for your consideration. Your efforts in this important project are appreciated, and I hope you will choose to participate in the SEARS-Pre project.

A handwritten signature in dark ink, reading "N. Kathryn Ravitch". The signature is fluid and cursive, with the first name "N." and last name "Ravitch" clearly legible.

N. Kathryn Ravitch
School Psychology Doctoral Candidate
University of Oregon



Information and Consent

The research questionnaire that you will be asked to complete is considered to have at most, minimal psychological risk. Responding to questions about students' skills could possibly increase your awareness of the child's social and emotional strengths and affect your perception of the child or behavior toward the child. The benefits of your participation in this study include your assistance in providing valuable information to help create a social-emotional rating scale to measure strengths in young children.

Your participation in the SEARS-Pre project is voluntary. Should you choose to participate, we ask that you complete the questionnaires on your own time (outside of your school day). If you choose to not participate, your decision will not affect your job, your relationship with the University of Oregon, your school, or your school district, and you will not be evaluated for employment purposes. If you decide to participate, you are free to withdraw your consent and discontinue participation at anytime without penalty.

Please keep a copy of this page for your records. If you have any questions regarding the research you may contact me, N. Kathryn Ravitch, at nravitch@uoregon.edu or phone me at (541) 357-8026. You may also contact my faculty advisor, Dr. Laura Lee McIntyre, through email at llmcinty@uoregon.edu or phone at 541-346-7452. If you have any questions regarding your rights as a research participant, contact the Office for Protection of Human Subjects, University of Oregon, Eugene, OR 97403 (541) 346-2501. This office oversees the review of the research to protect your rights and is not involved with this study.

By completing parts of the questionnaire, you are indicating that you have read and understood the information provided above, that you willingly agree to participate, that you know that you may decide to not participate, without penalty, that you have received a copy of this form, and that you are not waiving any legal claims, rights or remedies. Completion of the questionnaire also indicates that you understand you will receive a \$10 gift card for each questionnaire you complete.

The Social-Emotional Assets and Resiliency Scale for Preschool (SEARS-Pre)

Today's date ____/____/____
 Child's age _____
 Child's sex (Check box) male female
 Years of experience you have working in early education _____
 What is the highest level of education you have completed? (Check one box)

Less than high school
 High School GED
 Some college
 2-year college degree (Associate's)
 4-year college degree (BA/BS)
 Master's Degree/Education Specialist Degree
 Doctoral Degree
 Professional Degree (MD/JD/DMD)
 Other Please describe _____

Instructions:
 Please read each statement and circle the letter that best describes the child during the last 3 to 6 months. Please consider that these statements represent a wide range of skills, some of which may not be apparent in very young children. Please consider each statement based on the child's development, rather than comparing the child to older peers. Thank you!

	Never	Sometimes	Often	Always
1. Smiles & laughs when playing with other children	N	S	O	A
2. Says nice things to others or gestures to indicate when they have done something well (e.g., claps, high-5, says "wow", "good", etc.)	N	S	O	A
3. Other people see him/her as a leader	N	S	O	A
4. Is good at starting conversation with other children	N	S	O	A
5. Helps other people when they need it	N	S	O	A
6. Makes friends easily	N	S	O	A
7. Disagrees with other people without fighting or arguing	N	S	O	A
8. Responds appropriately to other people's facial expressions	N	S	O	A
9. Is accepted and liked by other children	N	S	O	A
10. Adjusts well to new teachers or caregivers	N	S	O	A
11. Looks at you when you talk to him/her	N	S	O	A
12. Smiles at other children	N	S	O	A
13. Remains calm in disappointing situations (e.g., Can't think before he/she acts)	N	S	O	A
14. Takes responsibility for own actions/behavior when prompted	N	S	O	A
15. Shows responsibility for things around him/her (e.g., toys, furniture, books)	N	S	O	A
16. Stands up for him or herself (e.g., If someone tries to take a belonging or does not follow through on a promise)	N	S	O	A
17. Uses words to solve problems	N	S	O	A

	Never	Sometimes	Often	Always
18. Uses clear communication when describing events (e.g., describes things that have happened in a manner that allows peers and adults to understand the main idea, using words, gestures, etc.)	N	S	O	A
19. Describes basic emotions (i.e., happy, sad, surprised, mad) of others (e.g., "you're happy" when teacher smiles)	N	S	O	A
20. Identifies reasons for own feelings (e.g., "I am sad because I lost my toy")	N	S	O	A
21. Says "please" and "thank you"	N	S	O	A
22. Is able to distract him or herself/find another activity after conflict with peers	N	S	O	A
23. Uses words when angry rather than hitting or pushing	N	S	O	A
24. Helps others solve problems	N	S	O	A
25. Compromises with other children when appropriate	N	S	O	A
26. In general, when life is hard, doesn't let things get to him/her	N	S	O	A
27. Comforts other children who are upset	N	S	O	A
28. Shows concern when others have their feelings hurt	N	S	O	A
29. Likes doing things for others	N	S	O	A
30. Calms down easily after being upset	N	S	O	A
31. Is good at identifying feelings	N	S	O	A
32. Takes turns	N	S	O	A
33. Initiates play with others easily	N	S	O	A
34. Asks permission before touching others' property	N	S	O	A
35. Tells adults how he/she feels	N	S	O	A
36. Is kind to others	N	S	O	A
37. Shares toys and other belongings	N	S	O	A
38. Makes good choices	N	S	O	A
39. In general, knows when people are upset, even when they say nothing	N	S	O	A
40. Asks for help when necessary	N	S	O	A
41. Tries to understand how others feel when they are angry, upset, or sad (e.g., "Why are you crying?")	N	S	O	A
42. Tries different ways to solve problems	N	S	O	A
How important do you think it is to measure the skills listed in this assessment?	Not Important	Somewhat Important	Fairly Important	Very Important
How useful would this assessment be for enhancing social and emotional skill development in your students?	Not Useful	Somewhat Useful	Fairly Useful	Very Useful

REFERENCES CITED

- Achenbach, T. M., & Rescorla, L. A. (2000). *Manual for the ASEBA Preschool Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- American Educational Research Association, American Psychological Association, & National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.
- Anastasi, A. (1988). *Psychological testing* (6th ed.). New York, NY, England: Macmillan Publishing Co, Inc.
- Batsche, G. M., Castillo, J. M., Dixon, D. N., & Forde, S. (2008). Best practices in designing, implementing, and evaluating quality interventions. In A. Thomas & J. Grimes (Eds.), *Best practices in school psychology V* (pp. 177-193). Bethesda, MD: National Association of School Psychologists.
- Beaver, B. R. (2008). A positive approach to children's internalizing problems. *Professional Psychology: Research and Practice, 39*, 129-136.
- Bierman, K. L., Domitrovich, C. E., Nix, R. L., Gest, S. D., Welsh, J. A., Greenberg, M. T., et al. (2008). Promoting academic and social-emotional school readiness: The Head Start REDI Program. *Child Development, 79*, 1802-1817.
- Birch, S. H., & Ladd, G. W. (1998). Children's interpersonal behaviors and the teacher-child relationship. *Developmental Psychology, 34*, 934-946.
- Blair, C., & Razza, R. P. (2007). Relating effortful control, executive function, and false belief understanding to emerging math and literacy ability in kindergarten. *Child Development, 78* (2), 647-663.
- Carlton, M. P. (2000). Motivation and school readiness in kindergarten children. *Dissertation Abstracts International, 60*(11-A), 3899A.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd edition). Hillsdale, NJ: Erlbaum.
- Cohen, J. (1992). "A power primer." *Psychological Bulletin, 112*, 155-159.
- Conway, A., & McDonough, S. (2006). Emotional resilience in early childhood: Developmental antecedents and relations to behavior problems. *Annals of the New York Academy of Sciences, 1094*, 272-277.

- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation, 10*(7), 1-9.
- Denham, S. A. (2006). Social-emotional competence as support for school readiness: What is it and how do we assess it? *Early Education and Development, Special Issue: Measurement of School Readiness, 17*, 57-89.
- Denham, S. A., Blair, K. A., DeMulder, E., Levitas, J., Sawyer, K. S., Auerbach Major, S. T., et al. (2003). Preschoolers' emotional competence: Pathway to mental health. *Child Development, 74*, 238-256.
- Denham, S. A., & Weissberg, R. P. (2004). Social-emotional learning in early childhood: What we know and where to go from here. In E. Chesebrough, P. King, T. P. Gullota, & M. Bloom (Eds.), *A blueprint for the promotion of prosocial behavior in early childhood* (pp. 13-50). New York: Kluwer Academic/Plenum Publishers.
- DeVellis, R. F. (2003). *Scale development*. Thousand Oaks, CA: Sage Publications, Inc.
- Doll, B., & Lyon, M. A. (1998). Risk and resilience: Implications for the delivery of educational and mental health services in schools. *School Psychology Review, 27*, 348-363.
- Eisenberg, N., Fabes, R. A., Murphy, B., Maszk, P., Smith, M., & Karbon, M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development, 66*, 1360-1384.
- Epstein, M. H., Dakan, E., Oswald, D. P. & Yoe, J. T. (2001). Using strengths-based data to evaluate children's mental health programs. In M. Hernandez & S. Hodges (Eds.), *Developing outcome strategies in children's mental health: Systems of care for children's mental health* (pp. 153-166). Baltimore, MD: Paul H. Brookes Publishing.
- Epstein, M. H., & Sharma, H. M. (1998). *Behavioral and Emotional Rating Scale: A strength-based approach to assessment*. Austin, TX: PRO-ED.
- Epstein, M. H., & Synhorst, L. (2009). *Preschool Behavioral and Emotional Rating Scale*. Austin, TX: PRO-ED.
- Fantuzzo, J., Bulotsky, R., McDermott, P., Mosca, S., & Lutz, M. N. (2003). A multivariate analysis of emotional and behavioral adjustment and preschool educational outcomes. *School Psychology Review, 32*, 185-203.
- Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment, 7*, 286-299.

- Friedrich, A. A., Rafaele Mendez, L. M., & Mihalas, S. T. (2010). Gender as a Factor in School-based Mental Health Service Delivery. *School Psychology Review, 39*, 122-136.
- Goodman, R. (1997). The Strengths and Difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry, 38*, 581-586.
- Greenspan, S., & Meisels, S. (1996). *Toward a new vision for the developmental assessment of infants and young children*. Washington, DC: Zero to Three, National Center for Infants, Toddlers, and Families.
- Gresham, F. M. (2002). Teaching social skills to high-risk children and youth: Preventive and remedial strategies. In M. R. Shinn, H. M. Walker, & G. Stoner (Eds.), *Interventions for academic and behavior problems II: Preventive and remedial approaches* (pp. 403-432). Bethesda, MD: National Association of School Psychologists.
- Gresham, F. M., & Elliott, S. N. (1990). *Social Skills Rating System*. Circle Pines, MN: American Guidance Service.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth-grade. *Child Development, 72*, 625-638.
- Hamre, B. K., Pianta, R. C., Downer, J. T., & Mashburn, A. J. (2008). Teachers' perceptions of conflict with young students: Looking behind problem behaviors. *Social Development, 17*, 115-136.
- Izard, C. E., Fine, S., Schultz, D., Mostow, A., Ackerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science, 12*, 18-23.
- Jimerson, S. R., Sharkey, J. D., Nyborg, V., & Furlong, M.J. (2004). Strength-based assessment and school psychology: A summary and synthesis. *The California School Psychologist, 9*, 9-19.
- Konold, T. R., & Pianta, R. C. (2005). Empirically-driven, person-oriented patterns of school readiness in typically developing children: Description and prediction to first-grade achievement. *Applied Developmental Science, 9*, 174-187.
- Kral, R. (1989). *Strategies that work: Techniques for solutions in the schools*. Milwaukee, WI: Brieg Family Therapy Center.
- Ladd, G. W., Birch, S. H., & Buhs, E. S. (1999). Children's social and scholastic lives in kindergarten: Related spheres of influence? *Child Development, 70*, 1373-1400.

- Lane, K. L., Stanton-Chapman, T., Jamison, K. R., & Phillips, A. (2007). Teacher and parent expectations of preschoolers' behavior: Social skills necessary for success. *Topics in Early Childhood Special Education, 27*, 86-97.
- LeBuffe, P. A., & Naglieri, J. A. (1999). *The Devereux Early Childhood Assessment*. Lewisville, NC: Kaplan Press.
- Masten, A. S. (2003). Commentary: Developmental psychopathology as a unifying context for mental health and education models, research, and practice in schools. *School Psychology Review, 32*, 170-174.
- McClelland, M. M., & Morrison, F. J. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly, 18*, 206-224.
- Merrell, K. W. (2002). *Preschool and kindergarten behavior scales* (2nd ed.). Austin, TX: PRO-ED.
- Merrell, K. W. (2008). *Behavioral social, and emotional assessment of children and adolescents* (3rd ed.). Mahwah, NJ: Erlbaum.
- Merrell, K. W. (2007). *Social-emotional assets and resilience scale- parent form*. Retrieved May 08, 2011 from <http://strongkids.uoregon.edu/SEARS.html>.
- Merrell, K. W., & Gueldner, B. A. (2010). *Social and emotional learning in the classroom: Promoting mental health and academic success*. New York: The Guilford Press.
- NAEYC. (2003). *Early Childhood Curriculum, Assessment, and Program Evaluation*. A joint position statement of the National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education. Retrieved May 8, 2011 from <http://www.naeyc.org/positionstatements>
- National Research Council. (2001). *Knowing what students know: The science and design of educational assessment*. Committee on the Foundations of Assessment, J. Pellegrino, N. Chudowsky, & R. Glaser, (Eds.), Division of Behavioral and Social Sciences and Education. Washington, D.C: National Academy Press.
- Newcomb, A. F., Bukowski, W. M., & Pattee, L. (1993). Children's peer relations: A meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin, 113*, 99-128.
- Pianta, R. C. (1997). Adult-child relationship processes and early schooling. *Early Education and Development, 8*, 11-26.

- Preacher, K. J., & MacCallum, R. C. (2003). Repairing Tom Swift's electric factor analysis machine. *Understanding Statistics*, 2(1), 13-43.
- Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *SRCD Social Policy Report*, XVI, 3-18.
- Raver, C. C., Garner, P., & Smith-Donald, R. (2007). The roles of emotion regulation and emotion knowledge for children's academic readiness: Are the links causal? In R. C. Pianta, K. Snow & M. Cox (Eds.), *Kindergarten transition and early school success* (pp. 121-148). Baltimore: Brookes Publishing.
- Raver, C. C., & Knitzer, J. (2002). *Ready to enter: What research tells policymakers about strategies to promote social and emotional school readiness among three- and four-year-olds*. New York: National Center for Children in Poverty.
- Reynolds, C. R., & Kamphaus, R. W. (2004). *BASC-2: Behavior assessment system for children, second edition manual*. Circle Pines, MN: American Guidance Service.
- Riggs, N. R., Blair, C. B., & Greenberg, M. T. (2003). Concurrent and 2-year longitudinal relations between executive function and the behavior of 1st and 2nd grade children. *Child Neuropsychology*, 9, 267-276.
- Romer, N., Ravitch, K., Tom, K., Merrell, K. W., & Wesley, K. L. (2011). Gender differences in positive social-emotional functioning. *Psychology in the Schools*, 48(10), 958-970.
- Rothbart, M. K., & Bates, J. E. (2006). Temperament. In W. Damon, R. Lerner, & N. Eisenberg (Eds.), *Handbook of child psychology: Vol. 3. Social, emotional, and personality development* (6th ed., pp. 99-166). New York: Wiley.
- Rudolph, S. M., & Epstein, M. H. (2000). Empowering children and families through strength-based assessment. *Reclaiming Children and Youth*, 8, 207-209.
- Salvia, J., & Ysseldyke, J. E. (with Bolt, S.). (2007). *Assessment in Special and Inclusive Education*. Houghton Mifflin Company, Boston, MA.
- Schroeder, C. S., & Gordon, B. N., (2002) *Assessment and treatment of childhood problems; A clinician's guide*. New York, NY: Guilford Press.
- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14.
- Shavelson, R. J., & Webb, N. M. (2005). Generalizability theory. In Green, J. L., Camilli, G. & Elmore, P. B. (Eds.), *Complementary Methods for Research in Education*. (3rd ed.) Washington, DC: AERA.

- Shields, A., Dickstein, S., Seifer, R., Giusti, L., Magee, K. D., & Spritz, B. (2001). Emotional competence and early school adjustment: A study of preschoolers at risk. *Early Education & Development, 12*, 73–96.
- Shonkoff, J. P., & Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development*. Washington, DC: National Academy Press.
- Sroufe, L. A., Egeland, B., Carlson, E., & Collins, W. A. (2005). *The development of the person: The Minnesota study of risk and adaptation from birth to adulthood*. New York: Guilford Publications.
- Staub, E. (1995). The roots of prosocial and antisocial behavior in persons and groups: Environmental influence, personality, culture, and socialization. In W. Kurtines & J. Gewirtz (Eds.), *Moral Development*. Boston: Allyn and Bacon.
- Stevens, J. (2002). *Applied multivariate statistics for the social sciences*. (4th ed.). Mahway, NJ: Lawrence Erlbaum Associates.
- Stormshak, E. A., & Dishion, T. J. (2002). An ecological approach to child and family clinical and counseling psychology. *Clinical Child and Family Psychology Review, 5*, 197-215.
- Squires, J., & Bricker, D. (2007). *An activity-based approach to developing young children's social and emotional competence*. Baltimore: Paul Brookes.
- Squires, J., Bricker, D. & Twombly, E. (2002). *Ages and Stages Questionnaires: Social-Emotional: A parent-completed child-monitoring system for social-emotional behaviors*. Baltimore: Paul Brookes.
- Suldo, S. M., & Shaffer, E. J. (2008). Looking beyond psychopathology: The dual-factor model of mental health in youth. *School Psychology Review, 37*, 52-68.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Allyn and Bacon.
- Tedeschi, R. G., & Kilmer, R. P. (2005). Assessing strengths, resilience, and growth to guide clinical intervention. *Professional Psychology Research and Practice, 36*, 230-237.
- U.S. Department of Education (2002). No Child Left Behind Act of 2001 (NCLB). Public Law 1-7-110. Retrieved May 8, 2011 from <http://www.ed.gov/policy/elsec/leg/esea02/index.html>

- Welsh, J. A., Nix, R. L., Blair, C., Bierman, K. L., & Nelson, K. E. (2010). The development of cognitive skills and gains in academic school readiness for children from low-income families. *Journal of Educational Psychology, 102*, 43-53.
- Worthington, R. W., & Whittaker, T. A. (2006). Using exploratory and confirmatory factor analysis in scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist, 34*, 806-838.
- Zins, J. E., Bloodworth, M. R., Weissberg, R. P., & Walberg, H. (2004). The scientific base linking social and emotional learning to school success. In J. Zins, R. P. Weissberg, M. Wang, & H. J. Walberg (Eds.), *Building academic success on social and emotional learning: What does the research say?* (pp. 3-22). New York: Teachers College Press.
- Zins, J. E., & Elias, M. J. (2007). Social and emotional learning: Promoting the development of all students. *Journal of Educational and Psychological Consultation, 17*, 233-255.