EARLY CHILDHOOD PRESERVICE TEACHERS' KNOWLEDGE AND APPLICATION OF SOCIAL EMOTIONAL ASSESSMENT AND INTERVENTION PRACTICES

by

LOIS MARIE PRIBBLE

A DISSERTATION

Presented to the Department of Special Education and Clinical Sciences
and the Graduate School of the University of Oregon
in partial fulfillment of the requirements
for the degree of
Doctor of Philosophy

March 2013

DISSERTATION APPROVAL PAGE

Student: Lois Marie Pribble

Title: Early Childhood Preservice Teachers' Knowledge and Application of Social Emotional Assessment and Intervention Practices

This dissertation has been accepted and approved in partial fulfillment of the requirements for the Doctor of Philosophy degree in the Department of Special Education and Clinical Sciences by:

Dr. Jane Squires	Chairperson
Dr. Hill Walker	Core Member
Dr. Wendy Machalicek	Core Member
Dr. Gina Biancarosa	Institutional Representative

and

Kimberly Andrews Espy	Vice President for Research and Innovation; Dean of the Graduate School

Original approval signatures are on file with the University of Oregon Graduate School.

Degree awarded March 2013

DISSERTATION ABSTRACT

Lois Marie Pribble

Doctor of Philosophy

Department of Special Education and Clinical Sciences

March 2013

Title: Early Childhood Preservice Teachers' Knowledge and Application of Social Emotional Assessment and Intervention Practices

Social emotional competence is an essential developmental skill recognized as the most critical for school and later success. Rising rates in behavioral referrals and preschool expulsion have brought increased attention to the importance of helping children develop social-emotional skills in the early years. In early childhood education a central factor of social-emotional/behavioral intervention is the competence of teachers to address children's needs. In order for the social-emotional needs of children to be addressed in early childhood classrooms, adequate preservice teacher training and support are needed.

The current studies focused on preservice teacher training and support regarding social emotional assessment and behavior intervention. Two studies were included in this research: (1) an early childhood preservice teacher survey and (2) Social Emotional Assessment Measure (SEAM) Preschool Teaching Guide development and behavior support plan pilot study. The first study focused on early childhood preservice teachers' current knowledge and practices regarding social-emotional development and behavior support. Participants included 228 preservice teachers from early childhood education (ECE) and early childhood special education (ECSE) teacher training programs in 15

different states. ANOVA results and answer percentages and means revealed trends in training, implementation, and preparedness by program type and degree level. The second study addressed how to support early childhood teachers in the creation of behavior support plans linked to assessment results. It took place in two phases: (1) development of a preschool teaching guide for the SEAM, and (2) a behavior support plan pilot study using the SEAM Preschool Teaching Guide. Participants included 25 preservice early childhood teachers from ECE and ECSE programs. Results from a two-way repeated-measures ANOVA indicated that the teaching guide intervention significantly improved the behavior support plan quality scores of preservice teachers. Results were further analyzed by program type and degree level.

CURRICULUM VITAE

NAME OF AUTHOR: Lois Marie Pribble

GRADUATE AND UNDERGRADUATE SCHOOLS ATTENDED:

University of Oregon, Eugene
University of New Mexico, Albuquerque

DEGREES AWARDED:

Doctor of Philosophy, Special Education/Early Intervention, 2013, University of Oregon
Master of Arts, Special Education/Early Intervention, 2001, University of New Mexico
Bachelor of Science, English and Sociology, 1996, University of New Mexico

AREAS OF SPECIAL INTEREST:

Personnel Preparation
Early Childhood Social Emotional Assessment
Curriculum Development

PROFESSIONAL EXPERIENCE:

Co-Instructor (Supervised College Teaching), Early Intervention Program, University of Oregon, 2010-2013

Clinical Supervisor, Early Intervention Program, University of Oregon, 2008-2012

Preschool Inclusion Consultant, Albuquerque Public Schools, 2006-2008

Child Find Screener, Albuquerque Public Schools, 2006-2008

Developmental Preschool Program Teacher, Albuquerque Public Schools, 2000-2006

GRANTS, AWARDS, AND HONORS:

Davis Bricker Award for Student Research, University of Oregon, 2012

PUBLICATIONS:

Pribble, L. & Barton, E. (2012) Maximizing Implementation of Evidence-Based Strategies in the Classroom. In Barton, E. E. & Harn, B. Educating Young Children with Autism Spectrum Disorders. Corwin Press / National Association for School Psychologists.

Squires, J., Pribble, L., Chen, C-I., & Pomes, M. P. (2012). Early childhood education. In W. M., Reynolds & G. E., Miller (Eds.), Volume 7: Educational Psychology, The Handbook of Psychology (2nd edition). Hoboken, NJ: John Wiley & Sons, Inc.

ACKNOWLEDGMENTS

I wish to express my deepest appreciation to my dissertation committee, Dr. Jane Squires, Dr. Hill Walker, Dr. Wendy Machalicek, and Dr. Gina Biancarosa for all their help in the preparation of this manuscript. I especially want to thank Dr. Squires, whose mentorship has provided me with many amazing opportunities and a lot of good advice. Thank you to my family members, in particular my daughters Faolán and Siobhán, who were patient and understanding during the hours I spent away from home completing my dissertation. A special thank you is also owed to my good friends Ching-I Chen, Kathy Moxley-South, Maria Pilar-Pomes, and Young-Ah Park. Thank you for providing encouragement and laughter throughout this process. Finally, thank you to all the preservice teachers who participated in this research. I am forever grateful for your willingness to participate in these studies and for your dedication to improving the lives of young children.

Dedicated to my parents, William and Jo Ann Pribble, who have always been my two best teachers. They have taught me many things but, most importantly, the true meaning of unconditional love.

TABLE OF CONTENTS

LIST OF FIGURES

Figure Page

LIST OF TABLES

Table Page

Table Page

CHAPTER I

INTRODUCTION

Social emotional competence is an essential developmental skill recognized as the most critical for school and later success (Jones & Bouffard, 2012). Rising rates in behavioral referrals and preschool expulsion have brought increased attention to the importance of helping children develop social-emotional skills in the early years (Gilliam, 2005). Intervening early with children who exhibit challenging behavior is not only a good idea, but essential to ensuring that these children have a bright future (Denham et al., 2003; Powell Fixsen, Dunlap, Smith, & Fox, 2007; Tremblay, 2000; Walker, Ramsey, & Gresham, 2004; Whitted, 2011). If intervention does not occur before children enter school they are much more likely to have negative long-term outcomes, with research indicating change needs to be made before the third grade (Bornstein, Hahn, & Haynes 2010; McClelland, 2006; McClelland et al., 2007; Tremblay, 2000).

In education a central factor of social-emotional/behavioral intervention is the competence of teachers to address children's needs (Tout, Zaslow, & Berry, 2006; Winton, 2010). As research has shown challenging behavior on the rise, it has also brought to light the lack of preparedness of early childhood teachers to deal with this issue (Arnold, McWilliams, & Arnold, 1998; Bodrova & Leong, 2006; Rimm-Kaufman, Pianta, & Cox, 2000). In order for the social-emotional needs of children to be addressed in early childhood classrooms, adequate preservice teacher training and support are needed. Without effective teachers, early childhood programs cannot have a substantial impact on children's social competence. Since the majority of young children in the

United States attend center-based early childhood programs (ChildStats.gov, 2011), missing the chance to intervene in these settings due to lack of teacher training is a potentially devastating wasted opportunity.

Providing early childhood teachers with the necessary knowledge, skills, and tools to address social competence can result in programs that are effective in improving children's behavior (Brown, Odom, & McConnell, 2008; Reynolds, Temple, Robertson, & Mann, 2001). When early childhood teachers implement behavior support strategies correctly and consistently children make progress in acquiring social competence (Benedict, Horner & Squires, 2007; Blair, Fox, & Lentini, 2010; Branson & Demchak, 2010; Duda, Dunlap, Fox, Lentini, & Clarke, 2004; Stormont, Smith, & Lewis, 2007; Tiano & McNeil, 2006). Therefore, early childhood education has the potential to make a substantial impact on children's long-term outcomes. High quality programs, with well trained teachers, are crucial in ameliorating the effects of poor social emotional competence (Gormley, Phillips, Welti, Newmark, Adelstein, 2011).

Teacher education programs play a central role in making sure early childhood educators enter the field prepared to meet classroom demands. In order to provide the tools and knowledge required to effectively address social emotional needs and challenging behavior, teacher preparation programs should include training on both social emotional assessment *and* intervention strategies. Assessment without intervention leads to nowhere, and intervention without assessment is haphazard. In other words, assessment alone can help target where a child needs assistance. However, if this information is not linked to effective intervention practices the child's skill level will most likely not improve. On the other hand, if teachers provide intervention without first

assessing the child's skills, the intervention may not address the actual area of need. Connecting assessment to intervention is particularly important for behavioral skills. Research on challenging behavior supports the position that interventions based on assessment results are more effective than those chosen arbitrarily (Hansford, Zilber, LaRue & Weiss, 2010; Kodak, Fisher, Clements, Paden, & Dickes, 2011). Therefore, it is imperative to train on both assessment and intervention components so that teachers learn how to identify children's areas of need and link this information to effective practices (Merrell, 2010; Hansford et al., 2010).

Once teachers enter the field it is not only important that they have the training to perform assessment and intervention, but appropriate tools to help them do so in real world contexts. A major barrier to behavioral assessment and intervention is teachers' perception of these practices as difficult and time consuming (Hansford et al., 2010; Stormont, Lewis, & Smith, 2005). Assessment tools and corresponding intervention resources need to be easy to understand and feasible to apply in a variety of classroom settings (Caselman & Self, 2008; Humphrey et al., 2011; Stormont et al., 2005). Current research indicates that there is a need for more resources within the early childhood field that fit this description (Stormont et al., 2005).

In conclusion, early childhood is a crucial time of social emotional development. During these years special attention needs to be paid to identifying and supporting children who exhibit difficulties with social competence. In order to do this, early childhood educators need to be adequately trained in social emotional assessment and intervention practices, and have access to proper resources to assist them once they enter

the field. The following chapter provides an overview of the literature on social emotional competence, the role of teachers, and assessment and intervention practices.

CHAPTER II

REVIEW OF THE LITERATURE

Social Competence in Early Childhood

Social competence refers to a child's ability to relate to and interact with others. Children who are socially competent are able to have reciprocal peer relationships, mediate social situations, and regulate their behavior independently (Brown & Conroy, 2011; Willoughby, Kupersmidt, Voegler-Lee, & Bryant, 2011). These skills are essential to positive child growth and school success. Unfortunately, social emotional competence and challenging behavior are a growing concern in early childhood education, with high rates of preschool expulsion across the country (Gilliam, 2005; Perry, Holland, Darling-Kuria & Nadiv, 2011). Early childhood educators report student lack of social-emotional competency as a major concern in their classrooms (Arnold et al., 1998; Rimm-Kaufman et. al, 2000). Because of the importance of social competence for future child outcomes, and its identification as a priority for intervention in early childhood classrooms, continued attention should be focused on finding ways to address social emotional needs in the early years.

Influences

A child's development is influenced by a complex interaction of factors that are both internal and external to the child. Bronfrenbrenner (1994) first described this as an ecological model, where several environmental systems interact to shape a person's development. Odom, McConnell, and Brown (2008) envisioned a model specific to how internal and external factors affect social competence (Figure 1). This model illustrates how varying factors impact children's preschool experiences and later life outcomes. The

factors are labeled “inside-out” and “outside-in” variables of social competence. Inside-out factors that influence social competence include neurology, gender, language development, cognition, temperament, and disability. Outside-in factors include family, classroom and teacher quality, early intervention, peers, and culture. Together these factors affect a child’s social competence in preschool which, in turn, affects later school and adult outcomes (Odom, McConnell, & Brown, 2008).

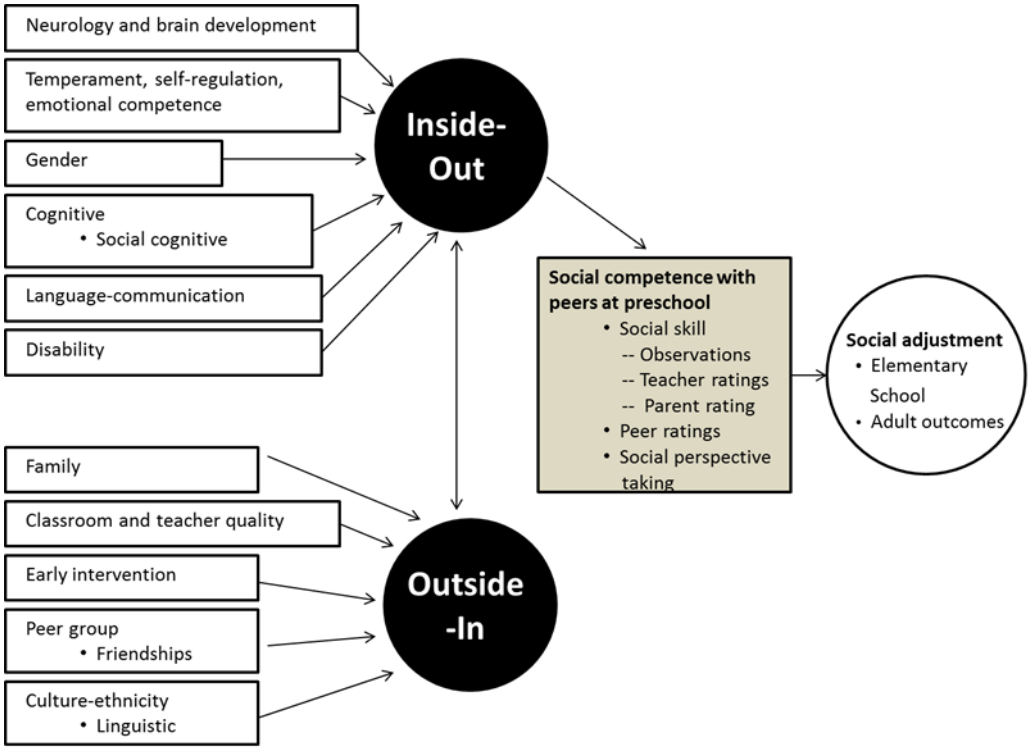

Figure 1. Inside-out and outside-in influences on social competence. (*Source:* Odom, McConnell & Brown, 2008).

Inside-out factors, those internal to the child, are influenced by both genetics and environment. In contrast, outside-in factors are based solely on the environment in which a child grows up. While interventions can take place at both the “inside-out” and

"outside-in" levels, this model points out the powerful influence community services can play in changing external factors.

Outcomes

Preschool children who have poor social competence often engage in negative interactions with peers and teachers, have a difficult time with anger management, and exhibit oppositional-defiant and aggressive behavior. Immediate consequences can include peer rejection, combative relationships, and expulsion from preschool (Gilliam, 2005; Walker et al., 2004). Poor social skills and challenging behavior are also predictive of reduced school success and can have long term consequences (Denham et al., 2003; Powell et al., 2007; Whitted, 2011). Research indicates that children who exhibit behavior problems in preschool are more likely to have discipline problems, poor academic trajectories, high levels of internalizing and externalizing behaviors in early adolescence, and expulsion from school (Bornstein et al., 2010; McClelland, 2006; McClelland et al., 2007; Muelle, 2010; Tremblay, 2000). Long-term outcomes include an increased risk for gang involvement, drug abuse, clinical depression and incarceration (Center for Evidence Based Practices, 2004).

Two external variables that can help change the trajectory of preschool children who exhibit poor social competence are (1) classroom and teacher quality, and (2) early intervention. Given the grave consequences of poor social competence it is essential that children who exhibit difficulty in this area are identified early and provided with appropriate and effective interventions. Therefore, efforts to improve early childhood education practices focused on social emotional competence and challenging behavior should be continued and intensified.

Teacher Training in Social-Emotional Competence and Challenging Behavior

Children's interactions and experiences with teachers can have a significant impact on their social emotional development and behavior (Hamre & Pianta, 2001). Early childhood teachers play a critical role in supporting positive growth in social emotional competency and, therefore, later child outcomes (Brown, et al. 2008; Reynolds et al., 2001). The type of training teachers receive regarding social-emotional development and challenging behavior affects their ability to effectively support social emotional growth (Buysse & Hollingsworth, 2009). A study by Alvarez (2007) found that teachers with more advanced training in emotional development and behavior management reacted to student behavior less negatively, were less stressed, and chose more positive intervention strategies than those with little training. Due to the strong link between teacher preparation, effective intervention, and child outcomes, it is important to ensure that preservice teachers receive proper training and support.

Lack of Consistent Early Childhood Teacher Training System and Requirements

Early childhood teachers report children's challenging behavior as a predominant reason for stress and burnout (Gebbie, Ceglowski, Taylor & Miels, 2012; Hastings & Bham, 2003). This phenomenon points to the need for more effective training and support in social skill development and behavioral interventions. In particular, more attention needs to be paid to the type of training provided by early childhood preservice teacher education programs. In order to help guide personnel preparation training practices within the childhood profession, both the National Association for the Education of Young Children (NAEYC) and the Council of Exceptional Children Division of Early Childhood (DEC) created professional standards for early childhood

(ECE) and early intervention/early childhood special education (EI/ECSE) teacher training programs. These standards include benchmarks relevant for training on social emotional assessment and intervention. The following tables provide an overview of the NAEYC (Table 1) and DEC (Table 2) personnel preparation standards related to assessment and intervention practices.

Table 1. Summary of NAEYC early childhood professional standards related to social emotional assessment and intervention.

Focus Area	Professional Standard	Key Elements
Assessment	3. Observing, documenting, and assessing to support young children and families	3a. Understanding the goals, benefits, and uses of assessment
		3b. Knowing about and using observation, documentation, and other appropriate assessment tools and approaches
		3c. Understanding and practicing responsible assessment to promote positive outcomes for each child
		3d. Knowing about assessment partnerships with families and with professional colleagues
Intervention	4. Using developmentally effective approaches to connect with children and families.	4a. Understanding positive relationships and supportive interactions as the foundation of their work with children
		4b. Knowing and understanding effective strategies and tools for early education

Table 1. (continued).

Focus Area	Professional Standard	Key Elements
		4c. Using a broad repertoire of developmentally appropriate teaching/learning approaches
		4d. Reflecting on their own practice to promote positive outcomes for each child

Note. Adapted from "Position Statement: NAEYC Standards for Early Childhood Professional Preparation Programs" by the National Association for the Education of Young Children (2009).

Table 2. Summary of DEC early childhood professional standards related to social emotional assessment and intervention.

Professional Standard	Knowledge	Skills
Intervention		
3. Individual learning differences	Impact of child's abilities, needs and characteristics and environments on development and learning	Develop, implement, and evaluate diverse learning experiences and strategies that match characteristics of infants and young children, and their families
4. Instructional strategies	Concept of universal design of learning	Ability to implement a variety of effective instructional strategies using developmentally appropriate curricula and practices to promote academic and social skills
5. Learning environments and social interactions	Ability to create an inclusive classroom, which is safe and supportive, and use effective classroom behavior management strategies to facilitate learning	Select and use developmentally and functionally appropriate materials to create a stimulus-rich classroom with embedded learning opportunities. Recommend and follow up with referrals

Table 2. (continued).

Professional Standard	Knowledge	Skills
7. Instructional planning	Understanding of theoretical and research foundations of curricula and instructional strategies, and the connection of assessments and progress monitoring to curricula	Collaborate with family members and professionals to create, implement and evaluate individualized intervention plans, which are developmentally and functionally appropriate and link to goals.
Assessment		
8. Assessment	Understand the role of family in the assessment process, as well as legal distinctions among eligibility categories. Align assessment with curriculum, standards and regulations.	Administer assessment in a family-friendly manner using appropriate tools and materials that to gather information in critical developmental domains. Use data to address family concerns, identify priorities, and focus on child strengths.

Note. Adapted from "Early Childhood Special Education/Early Intervention (birth to age 8) Professional Standards with CEC Common Code," by Division for Early Childhood (2008).

Although these professional standards exist and are promoted within the early childhood field, research indicates that they are inconsistently reflected across state certification processes for early childhood practitioners (Stayton, Smith, Dietrich & Bruder, 2012).

Providing consistent training across teacher education programs is particularly challenging in the early childhood field due to lack of a cohesive early childhood system (Winton, 2000; Winton, 2010). Although specific early childhood programs may have training requirements for the teachers they hire (e.g., Head Start), there is no nationally enforced standard for early childhood teacher education and certification (Winton, 2010). Because of this, early childhood teacher training programs vary widely in the type of

training (e.g., general early childhood, early childhood special education) and levels of certification (e.g., Associates, Bachelors, Masters) that they provide. Different program types and certification lead to varied course content and requirements. These differences make it difficult to assess the depth of training preservice teachers receive regarding social emotional development and challenging behavior. Not knowing the type of training preservice teachers receive is particularly disconcerting given that research indicates a strong link between teacher behavior and children's social skill development (Alvarez, 2007; Gebbie et al., 2011; Stormont, 2002).

Program Content on Social Emotional Development and Challenging Behavior

Hemmeter, Santos, and Ostrosky (2008) surveyed faculty from early childhood teacher education programs in nine states in an attempt to find out what training they were providing regarding social-emotional development and challenging behavior. Survey results indicated that programs were focusing on supporting social emotional development, partnering with families, and implementing preventative practices. Programs were less likely to cover how to design and implement interventions to address challenging behavior (Hemmeter et al., 2008). These results imply that more specific training needs to be provided on assessment, planning, intervention, and monitoring of social emotional skills and challenging behavior.

Although these survey results provide valuable information, they lack one very important component—the voices of preservice teachers themselves. Program faculty can provide critical information regarding the content and experiences they give their students; however, it is more difficult for them to give accurate information on what preservice teachers have garnered from these experiences. Studies of preservice teachers'

perceptions of preparedness have focused on teachers who work in elementary, middle, and high schools (Kandakai & King, 2002; Stoughton, 2005). Little research has been done with early childhood educators. Therefore, more research is needed on how well prepared early childhood preservice teachers feel to address social-emotional skills and challenging behavior once they leave school and are entering the field. This information can be used to help refine programs and develop relevant resources that can be utilized by new teachers as they enter the field.

Resources and Support on Social-Emotional Development and Challenging Behavior

In order for early childhood personnel to be able to meet the social emotional and behavioral needs of young children in their programs they must have adequate support and resources (Benedict et al., 2007; Blair et al., 2010; Duda et al., 2004). Early childhood teachers report a general lack of support in developing and carrying out behavioral interventions (Gebbie, Ceglowski, Taylor & Miels, 2012). This may be one reason for the high levels of expulsion rates in preschool programs. Therefore, it is important to assess what resources and supports are readily available to new early childhood teachers.

Recently, there has been a concerted effort to provide early childhood educators with free and easy access to information and resources for addressing social emotional skills and challenging behavior. Federally funded training initiatives such as the Center on the Social Emotional Foundations of Early Learning (CSEFEL) and Technical Assistance Center on Social Emotional Intervention (TACSEI) were created to give this support (Catlett, 2010). Both initiatives include on-line training and free resources.

However, both initiatives are funded for a limited amount of time, preventing the long-term dissemination of materials. There is also little information on how widely these materials have been disseminated within the early childhood field. Therefore, there continues to be a need for resources and materials aimed at helping new teachers assess, plan, and provide interventions for children with social-emotional needs and challenging behavior.

Social-Emotional Assessment and Intervention

Importance of Assessment

The first step in providing services to children with social-emotional needs and challenging behavior is identifying who they are and targeting their specific areas of need. There continues to be a call for earlier detection of social-emotional and behavioral problems in order to catch children early (Briggs-Gowan & Carter, 2008; Forness et al., 2000; Kruizinga, Jansen, Carter & Raat, 2011). Early identification through screening and assessment is key to preventing long-term problems. Once children are identified as needing support, educators can use results from social-emotional assessments to help create intervention plans that are appropriate and effective.

Recent attention has been given to the importance of developing social emotional assessment measures that are appropriate for young children (Briggs-Gowan & Carter, 2008; Humphrey et al., 2011). When choosing a social emotional measure for preschool children, it is important to consider the age-appropriateness, expense, ease of use, time needed to complete, and involvement of the family (Caselman & Self, 2008; Humphrey et al., 2011). All of these factors impact whether or not the tool is utilized and used appropriately by practitioners. Practitioner use is especially important to consider in the

early childhood field due to varied training and lack of administrative support in assessing social emotional development. In order to reach the widest range of children, tools need to be realistic for use in multiple settings by practitioners with varying degrees of experience.

Linking Assessment to Intervention

Once a social-emotional assessment tool has been used to identify children who would benefit from intervention, the next step is to create an intervention plan. Information garnered from the assessment helps target specific areas of need and can be used to create individualized interventions. Research indicates that behavior support plans linked to assessment results are an effective way to help practitioners implement appropriate interventions (Ishuin, 2009; Hansford et al., 2010; Wood, Blair, & Ferro, 2009). Research also indicates early childhood education teachers need support in developing and carrying out behavioral plans (Wood et al., 2009).

Although there are several social emotional assessment tools for preschool children, there is a lack of linkage between assessment results and intervention practices (Merrell, 2001). Linking assessment to actual intervention strategies can help practitioners create appropriate behavior support plans, implement effective practices, and monitor progress (Merrell, 2001). The early childhood field would benefit from assessment tools that are easy for practitioners to use and that contain an intervention component that helps them link assessment results to behavior support plan development.

Social Emotional Assessment Measure (SEAM)

The Social Emotional Assessment Measure (SEAM) is a curriculum-based assessment tool that focuses on young children's social emotional skill development

(Squires & Bricker, 2007). It has been designed to be used by both teachers and caregivers and can be completed in less than 30 minutes. Research on the SEAM indicates that it is a valid and reliable tool for assessing young children's social emotional competence (Squires et al., 2012, Squires et al., 2013). Practitioners report that the SEAM is clear and easy to understand and provides meaningful information on children's social emotional abilities and needs (Squires et al., 2012). Research also indicates that the SEAM can be used to help parents and practitioners identify and develop specific goals focused on social-emotional skills (Squires et al., 2012).

The Preschool version of the SEAM was developed for children between the ages of 36 to 63 months and consists of 41 items targeting 10 key benchmarks of children's social emotional behaviors (Table 3). The SEAM has the potential to be widely used in preschool programs due to its ease of use and quickness of administration. It can be used to help identify specific areas of social emotional functioning where children would benefit from intervention. This information can then be used to develop individualized intervention plans for students. Currently there is no intervention component of the SEAM. The Preschool SEAM could be strengthened by adding a teaching guide that helps practitioners link assessment results to evidence-based intervention practices based on a Positive Behavior Support (PBS) and Response to Intervention (RTI) framework. A teaching guide would provide extra support and guidance to teachers, particularly novices to the field, for creating effective behavior support plans.

Table 3. Benchmarks for the preschool version of the SEAM.

Benchmark	Number of Items
1. Preschool-age child demonstrates healthy interactions with others.	5
2. Preschool-age child expresses a range of emotions.	4
3. Preschool-age child regulates social emotional responses.	4
4. Preschool-age child shows empathy for others.	2
5. Preschool-age child shares and engages with others.	4
6. Preschool-age child demonstrates independence.	4
7. Preschool-age child displays a positive self-image.	3
8. Preschool-age child regulates attention and activity level.	5
9. Preschool-age child cooperates with daily routines and requests.	3
10. Preschool-age child shows a range of adaptive skills.	7

Pyramid Model and Positive Behavior Support

Positive Behavior Support (PBS) is a well established intervention practice in elementary, middle, and high schools. Blair et al. (2010) define PBS as a "process used to develop assessment-based behavior support plans for the individualized intervention of persistent challenging behavior" (p. 68). Over the past ten years efforts have been made to transfer and implement PBS practices in early childhood settings (Blair et al., 2010; Carter, & Van Norman, 2010; Duda et al., 2004; Stormont, Lewis & Beckner, 2005; Wood et al., 2009; Wood, Ferro, Umbreit, & Liaupsin, 2010). This effort has had unique challenges due to lack of support and training in PBS within early childhood classrooms. Research indicates that PBS strategies are often not implemented in early childhood

classrooms, or implemented inconsistently or incorrectly (Carter, 2010; Stormont et al., 2007).

One response to the need for more training and implementation of PBS practices in early childhood education has been the development of the Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children (Fox et al., 2003). This model (Figure 2), which incorporates a Response to Intervention (RTI) framework, helps teachers identify the levels of support necessary to help children develop positive social emotional skills and decrease challenging behavior in the classroom (Bayat, Mindes, & Covitt, 2010; Fox, Carta, Strain, Dunlap, & Hemmeter, 2010). The combination of PBS and RTI frameworks has been shown to be effective in addressing social emotional/behavioral needs in classroom settings (Menzies & Lane, 2011).

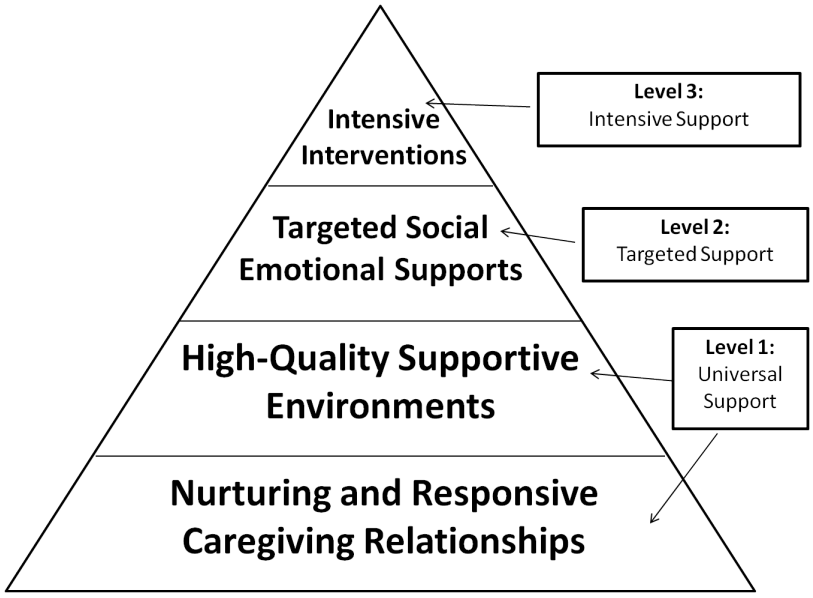

Figure 2. Pyramid model. (*Source:* Fox et al., 2010).

The Pyramid Model is comprised of four tiers that work at three levels of intervention: universal, secondary, and tertiary. The bottom two tiers ("nurturing and responsive caregiving relationships" and "high-quality supportive environments") are practices that benefit all children and should be universally promoted (Fox et al., 2010; Fox et al., 2003). Interventions at this level include being responsive to children's conversations; using social-emotional curricula; providing a consistent classroom schedule and routine; and providing multiple opportunities for children to engage in social activities (Fox et al., 2010; Fox et al., 2003). The third tier, "targeted social emotional supports" provides secondary prevention, with interventions at this level focused on children who need support beyond universal promotion. Interventions at this level include curriculum modifications and adaptations and explicit teaching of social emotional skills and behavior regulation strategies (Fox et al., 2010; Fox et al., 2003). The final tier of the pyramid "intensive interventions" includes tertiary intervention aimed at children with persistent challenging behavior who require a higher level of support. Tertiary interventions include the use of functional behavior assessments and even more targeted and intensive teaching of behavioral skills (Fox et al., 2010; Fox et al., 2003).

Research using the framework of the Pyramid Model indicates that it is an effective approach for training early childhood teachers to implement practices that support healthy social emotional development and appropriately address challenging behavior (Branson, 2011; Branson & Demchak, 2010). This is especially promising since the Pyramid Model is beginning to be more widely promoted in both preservice training programs and in classrooms. Teacher resources developed to coincide with the

Pyramid Model framework will be especially relevant for teachers entering the early childhood education field.

Purpose of Study

The purpose of this research was to (1) assess the current state of early childhood preservice teacher training in the area of social emotional skills/behavior management, and (2) integrate information known about social emotional competence, teacher training, effective assessment, and intervention practices to develop a useful resource for new teachers. This resource, the SEAM Preschool Teaching Guide, has the potential to assist teachers in developing individualized behavior support plans linked to social emotional assessment results and evidence-based practices.

Two studies were included in this research: (1) early childhood preservice teacher survey, (2) SEAM Preschool Teaching Guide development and behavior support plan pilot study (Figure 3). Each study addressed unique research questions and developed novel materials. The first study focused on preservice teachers' current knowledge and practices regarding social-emotional development and behavior support. The second study addressed how to support early childhood teachers in the creation of behavior support plans linked to assessment results. It took place in two phases: (1) development of a preschool teaching guide for the Social Emotional Assessment Measure (SEAM), and (2) a behavior support plan pilot study using the SEAM Preschool Teaching Guide.

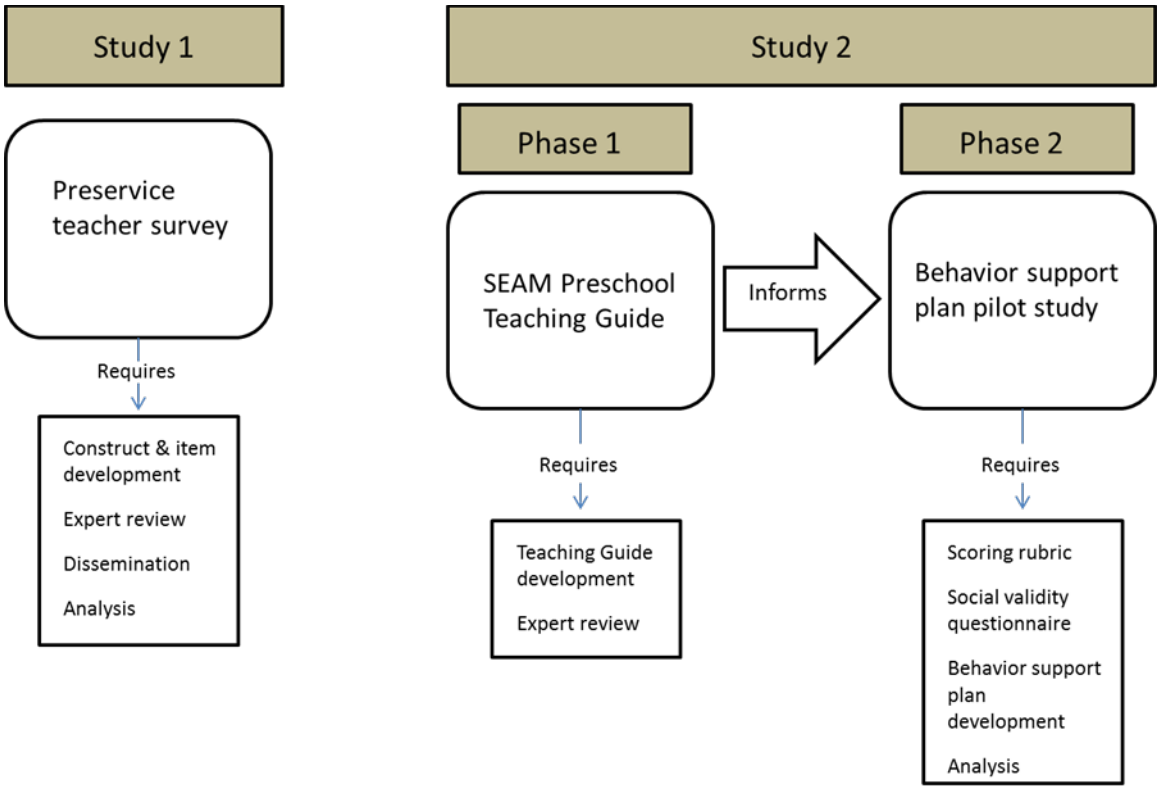

Figure 3. Research design.

Preservice Teacher Survey

The early childhood preservice teacher survey was designed to gather descriptive data used to explore the following research questions:

1. What is the level and quality of preservice training focused on social emotional development and challenging behavior within different types and degree levels of early childhood teacher training programs?
    a. What training have preservice teachers received on social emotional assessment and behavioral interventions?

b. What are the current social emotional/behavioral support strategies implemented by preservice teachers during practicum and teaching experiences within their teacher training programs?
c. How prepared do preservice teachers feel to address social-emotional needs and challenging behavior of young children?

2. Are there significant differences in the training, implementation, and preparedness levels of preservice early childhood education teachers based on (a) program type, (b) degree level, and (c) years of experience?
3. What challenges do preservice teachers face in addressing social-emotional development and implementing behavioral support strategies?
4. What materials and supports do preservice teachers want in order to successfully foster young children's social emotional development and effectively implement behavioral support strategies when they enter the workforce?

Behavior Support Plan Study

The behavior support plan pilot study focused on testing the use of the SEAM Preschool Teaching Guide to create behavior support plans. It addressed the following research question:

1. Is there a significant difference between the quality of behavior support plans written by preservice teachers independently and those written using the SEAM Preschool Teaching Guide?

Protection of Human Subjects

A proposal for this research study, including all procedures and instruments, was submitted to the University of Oregon's Institutional Review Board (IRB). Participants in

both the survey and behavior support plan studies were provided with a consent form that described their rights as well as benefits and risks involved in research participation. Participation was voluntary and all participants were informed of their right to withdraw from the studies at any time. Several processes were taken in order to establish and maintain confidentiality of participants: 1) the online survey was anonymous, with no identifying information linked to answers; 2) the researcher had sole access to online survey data; 3) survey data were eliminated from the Qualtrics server thirty days after the end of data collection; 4) numbers were used instead of names on behavior support plans and social validity questionnaires; 5) behavior support plan materials were locked in a file cabinet.

The following chapters provide a description of the methods, results, and a discussion of the findings for both research studies. Information in each section is provided first for Study I, followed by information for Study II.

CHAPTER III

METHODS

Study I: Early Childhood Preservice Teacher Survey

A web-based survey was conducted to assess the knowledge, practices, and comfort levels of preservice early childhood teachers in addressing the social-emotional development and challenging behaviors of preschool children. The results of the survey were used to gain a broad picture of preservice teachers' overall understanding of social-emotional and behavioral practices, and to identify support needs.

Participants

Pre-service teachers currently enrolled in their final term of an early childhood teacher training program, or who had graduated from their program within the past three months, were recruited to participate in this study. Participants were chosen through purposive sampling and recruited from early childhood teacher training programs within all five regions of the United States (West, Southwest, Midwest, Southeast, Northeast). In order to gain a broad and varied sample of preservice teachers, three states were selected from each of the five regions of the United States. States were purposely chosen from each region to ensure a representation of both significant urban and rural populations, and a range of ECE and ECSE program types. The following states were selected: West (Colorado, Oregon, Washington), Southwest (Arizona, New Mexico, Texas), Midwest (Iowa, Kansas, Minnesota), Southeast (Florida, Georgia, Kentucky), Northeast (Connecticut, New Jersey, Pennsylvania).

Once states were chosen, early childhood teacher training programs were identified from state agency lists as well as through internet searches. Programs were

included if they prepared students to work with children between the ages of three to five. In order to obtain a sample population that covered the broad range of early childhood education training programs participants were recruited from programs of varying specializations (Early Childhood Education [ECE], Early Childhood Special Education/Early Childhood Special Education [ECSE], Dual) and degree levels (Associates [AA], Bachelors [BA], Masters [MA]).

A total of 350 early childhood education teacher training programs were identified across all fifteen states. Once a final list of qualifying programs was established, a contact for each school was identified (e.g., program coordinator) through state agency lists or via an Internet search. Program contacts were sent an e-mail asking them if they would be willing to send the survey link to qualifying students in their program. Follow-up emails were sent to contacts that did not respond to the initial email. A total of 71 program representatives (22%) agreed to send the survey to their students/graduates. Contacts who agreed to participate in sending out the survey were sent a separate email with a message to students that included a description of the study and a link to the survey. Further advertisement of the survey was done by posting an invitation to the survey link on Facebook pages of teacher training programs that met criteria, as well as national early childhood teacher organizations (e.g. NAEYC and DEC) and their state affiliates. As an incentive for participation, a drawing was held for ten $50.00 gift cards to an on-line retailer. All survey participants were entered into the drawing and had an equal chance of receiving a gift card.

Three-hundred and twenty-five pre-service teachers started the online survey. Of those, 72 did not meet criteria for the survey and 25 participants chose to drop out of the

survey before they completed it. A total of 224 pre-service teachers completed the entire survey, and 4 others completed at least 95% of the survey. The total sample size was 228. Forty-six percent of participants (n = 106) were from ECE programs, 32% (n = 72) from ECSE programs, and 22% (n = 50) from Dual programs. Almost half, 49% (n = 113), attended a Masters-level program, 19% (n = 44) were from Bachelors-level programs, and 31% (n = 71) were from Associates-level programs. Regional representation varied with 33% (n = 75) of respondents from the West, 22% (n = 50) from the Northeast, 20% (n = 46) from the Midwest, 14% (n = 32) from the Southeast, and 11% (n = 25) from the Southwest. Table 4 provides demographic information on survey participants by program type.

Table 4. Survey participant demographic information percentages by program type.

Variable	ECE (n = 106)	ECSE (n = 72)	Dual (n = 50)
Degree level			
AA	57.5%	9.7%	6.0%
BA	25.5%	0.0%	34.0%
MA	17.0%	90.3%	60.0%
Region			
West	23.6%	61.2%	12.0%
Southwest	20.8%	2.8%	2.0%
Midwest	15.1%	12.5%	42.0%
Southeast	14.2%	15.3%	12.0%
Northeast	26.4%	8.3%	32.0%
Years of Experience			
0	18.9%	18.1%	18.0%
1-2	23.6%	18.1%	20.0%
3-5	20.8%	27.8%	26.0%
6-9	16.0%	26.4%	32.0%
10 or more	20.8%	9.7%	4.0%

Measures

Participants were asked to complete a 32 item on-line survey developed through a construct modeling approach (Wilson, 2005). A construct map of social-emotional/behavioral practices in early childhood education was created to help define the scope of the survey. Research on social-emotional development (Brown & Conroy, 2011; Hebert-Myers, Guttentag, Swank, Smith , & Landry, 2006), social-emotional assessment (Caselman & Self, 2008; Humphrey et al., 2011; Squires & Bricker, 2007), behavioral interventions (Dunlap et al., 2006; Stormont, Lewis, & Beckner, 2005), and the Teaching Pyramid Model (Fox et al., 2010; Fox et al., 2003; Hemmeter, Fox, Jack, & Broyles, 2007; Hemmeter, Ostrosky, & Fox , 2006; Menzies & Lane, 2011) were used to develop the construct map. Three sub-domains were identified under the core construct: (1) training, (2) implementation, and (3) preparedness. Core competencies were outlined for each sub-domain, with ratings ranging from missing capacity to proficiency. These competencies were used to guide the creation of survey items. Items were also developed to gather demographic information. Other factors taken into consideration during construction of the survey were the length of time it would take participants to complete it, the comfort level of participants in answering the questions, and the ability to analyze data generated from items. The survey consisted of three types of questions: (1) categorical response, (2) ordered response (four point Likert scale), and (3) open-ended.

Criteria questions. In order to ensure that participants qualified for participation in the study the survey began with three criteria questions. The questions asked participants if (1) they were currently enrolled in, or had recently graduated from, an ECE or ECSE program, (2) their program included training on teaching children between the

ages of 3 to 5, and (3) they were going to complete their program in the next term, or had completed their program within the previous two terms. If participants answered no to any of these questions they were thanked for their willingness to participate in the survey, informed that they did not qualify, and the survey was ended.

Demographic variables. Demographic data were collected on the participants in order to assess differences in survey answers based on the following variables:

1. ***Program type.*** Type of teacher training program was specified as (a) early childhood education (ECE), (b) early childhood special education (ECSE), and (c) Dual program (general and special early childhood education)

2. ***Degree level.*** Degree level was specified as (a) Associates (AA), (b) Bachelors (BA), and (c) Masters (MA).

3. ***Years of experience.*** Years of early childhood teaching experience, outside of those completed in a teacher training program, were categorized as (a) 0, (b) 1-2, (c) 3-5, (d) 6-10, and (e) more than 10.

Sub-domain Questions

Questions were created for each sub-domain to ensure that all parts of the construct were well represented in the survey. Each sub-domain contained between six to eight questions.

Training. The survey contained six questions related to training. Questions within the training sub-domain focused on the content related to social emotional/behavioral assessment students were trained on within their teacher training programs. This included specific social emotional/behavioral approaches and practices (e.g., the Pyramid Model,

social emotional assessment) and intervention strategies (e.g., creating consistent schedules and routines, using visual aids to support positive behavior).

Implementation. The survey contained six questions related to implementation. Questions within the implementation sub-domain focused on the specific social emotional/behavioral assessment and intervention practices and strategies students actually carried out within their practicum and student teaching experiences.

Preparedness. The survey contained seven questions related to preparedness. Questions within the preparedness sub-domain focused on how well-prepared students felt to independently carry out specific social emotional/behavioral assessment and intervention practices and strategies.

Expert Reviewers and Field Pretest

In order to help establish the construct and content validity of the preservice teacher survey, an expert panel reviewed it prior to completion. Professionals with specialized training in the areas of survey design, social emotional development, and behavioral interventions reviewed the construct map and survey items. Reviews focused on: (a) completeness of the construct map, (b) relevance of the survey questions in relation to the construct being analyzed, (c) organization and structure of the survey, and (d) clarity of the survey items.

A small field pretest of the survey was conducted with a group of ten preservice teachers in order to assess clarity of the survey items and time needed to complete the survey. Feedback from expert reviews and the field pretest were used to make modifications to the construct map and survey instrument prior to survey dissemination.

Study II: SEAM Preschool Teaching Guide and Behavior Support Plan Study

This study consisted of two phases. 1) development of the SEAM Preschool Teaching Guide, and 2) a behavior support plan pilot study.

Phase 1: Development of the SEAM Preschool Teaching Guide

A teaching guide was created for the preschool version of the Social Emotional Assessment Measure (SEAM). The teaching guide was directly linked to items on the preschool SEAM. For the purposes of this dissertation, two child benchmarks were addressed: 1) child shares and engages with others, and 2) child cooperates with daily routines and requests. These benchmarks were chosen based on their importance for children's success in early childhood classrooms (Chien et al., 2010; Coolahan, Fantuzzo, Mendez & McDermott, 2000; Hebert-Myers et al, 2006; Vaughan et al., 2007), identification as a concern among preschool teachers (Kalb & Loeber, 2003) and research linking classroom practices and the development of these skills (Ducharme, Harris, & Milligan, 2003; Hanley, Heal, Tiger, & Ingvarsson, 2007 ; Wachs, Gurkas, & Kontos, 2004; Vitiello, Booren , Downer, & Williford, 2011).

Both the content and format of the teaching guide were created to address the identified needs of preservice teachers. Attention was paid to making the teaching guide accessible to early childhood educators from various types and levels of programs. Therefore, readability was taken into account and jargon words were avoided. In order to present a consistent intervention model for the field of early childhood intervention, the teaching guide was structured to coincide with the Pyramid Model for Promoting Social Competence and Preventing Challenging Behavior (Fox et al., 2003). This model has been used in early childhood education research and training throughout the past decade,

with positive results demonstrated (Blair et al, 2010: Branson & Demchak, 2010; Duda et al., 2004). The teaching guide specifically focused on level 1 (universal) and level 2 (targeted) interventions. Level 3 (tertiary) interventions were not included since the target audience was early childhood educators from a wide background of experience. More intensive training is required to appropriately carry out level 3 interventions, and many early childhood educators have not received this type of training. Therefore, a chapter on functional behavior assessment, and accessing resources for level 3 interventions was included as a supplemental resource. This chapter was not included in the pilot study.

The teaching guide was divided into SEAM benchmarks in order to clearly link items on the SEAM to tiered intervention practices that address targeted social-emotional/behavioral skills. Each benchmark included the following sections (1) identification and description of the benchmark, (2) suggestions for Level I interventions (entitled "Setting Up Your Classroom for Success", and (3) suggestions for Level II interventions based on SEAM items (entitled "Targeted Support for Specific Children"). Interventions suggested in the teaching guide were based on evidence based practices. In order for interventions to be considered evidence-based they had to be informed by research findings that: (a) demonstrated a (statistical or functional) relationship between the intervention and improvement in the specified social-emotional/behavioral skill, (b) included research with children ages 3 to 5, (c) were carried out within the context of preschool classrooms (Dunst & Trivette, 2010; Wolery & Hemmeter, 2011).

A behavior support plan (BSP) form was created to be used in conjunction with the SEAM teaching guide. The purpose of the form is to assist practitioners in developing individualized behavior support plans linked to SEAM assessment results. The form

includes sections that address the following components: (1) identification of target behavior, (2) specific examples of how the child demonstrates the target behavior, (3) identification of appropriate universal support strategies (Level I interventions), (4) identification of appropriate targeted support strategies (Level II interventions), (5) context of intervention, (6) feedback/consequences for *both* successful *and* unsuccessful responses, and (7) process for monitoring and documenting child progress.

Expert Reviewers. In order to assess content validity of the SEAM Preschool Teaching Guide, experts in the field of early childhood social emotional interventions were asked to review and provide feedback on the guide including: (a) how well the teaching guide adheres to the Pyramid Model, (b) how well it links to the SEAM, (c) correct identification of evidence-based practices, and (d) appropriateness of suggested interventions for specified skills. Reviewers included an author of the SEAM, key center personnel from the Technical Assistance Center on Social Emotional Intervention (TACSEI), and an early intervention behavior specialist.

Phase 2: Behavior Support Plan Study

The final stage of research was a pretest-posttest pilot study to assess the feasibility of using the SEAM Preschool Teaching Guide to help preservice teachers develop high quality behavior support plans.

Participants. Pre-service teachers currently enrolled in their final year of an early childhood teacher training program, or who had graduated from a program within the past three months were recruited to participate in this study. Participants were recruited from ECE and ECSE teacher training programs in Oregon through fliers, emails, and craigslist postings. A total of 25 preservice teachers from six different early childhood teacher

training programs took part in the pilot study. All participants received a payment of $50.00 after the completion of the study as an incentive for participation.

Participants were asked to fill out a demographic questionnaire at the beginning of the study. Information from the questionnaires showed that 52% (n = 13) of the study participants were from ECSE programs and 48% (n = 12) were from ECE programs. Fifty-two percent (n = 13) were from Masters-level programs, 24% (n = 6) were from Bachelors-level programs, and 24% (n = 6) were from Associates-level programs. All of the study participants reported that they had taken a class on behavior management. Twenty-seven percent (n = 6) indicated that they had received additional training on social-emotional/behavioral interventions outside of their teacher training program.

Participants were asked how familiar they were with the Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children. Forty-one percent (n = 9) reported that they were not at all familiar with the model, 32% (n = 7) reported they were slightly familiar, and 27% (n = 6) reported they were moderately familiar with the model. No participants indicated they were extremely familiar with the Pyramid model.

Training. Participants took part in a one-time behavior support plan training that consisted of brief overviews of the SEAM and the SEAM Preschool Teaching Guide, the completion of two behavior support plans, and a social validity questionnaire. A total of eight training sessions were conducted for the behavior support plan study. Each session ranged from having one to seven participants. They trainings took place in university classrooms, library study rooms, and a community center. Training sessions lasted

between 90 minutes to 180 minutes, depending on how long it took participants to complete the behavior support plans.

SEAM overview. Study participants were first provided with a short Powerpoint presentation on the SEAM. The training took approximately 20 minutes and included information on the purpose of the SEAM, how to complete the SEAM, how to score the SEAM, and how to use the SEAM to guide intervention. Participants were provided with a copy of the Preschool SEAM to review.

Behavior support plan I. After the SEAM training, participants were asked to develop a behavior support plan for a preschool child. They were provided with the following materials: (a) a completed SEAM preschool protocol, (b) a corresponding vignette of a preschool student, and (c) a notepad on which to write the support plan. Two different vignettes were used in the study. Distribution of vignettes was counterbalanced to control for sequencing effects.

Participants were instructed to use the protocol and vignette to create a behavior support plan for the described preschool student. They were directed to use their "as usual" format for writing a behavior support plan, based on how their teacher training programs taught them to create a behavior support plan, and how they would typically write one out in the field. Other basic guidelines were provided (e.g., identify the target behavior, identify specific practices to address the behavior, write the support plan so it could be understood and implemented by other practitioners). There was no time limit on writing the behavior support plan. Participants were instructed to use as much time as they needed, and turn it in when they were finished.

SEAM preschool teaching guide training. Once all participants in the session completed Behavior Support Plan I, they were given a short training on the SEAM Preschool Teaching Guide. The training took approximately twenty minutes. During the training, participants were given a sample of a completed SEAM protocol, a corresponding behavior support plan, and a copy of the SEAM Preschool Teaching Guide. Participants were trained on how to link SEAM results to the Teaching Guide, and fill out the behavior support plan form.

Behavior support plan II. After participants received the SEAM Preschool Teaching Guide training, they were asked to create a second support plan. Participants were provided with the following materials: (a) a completed SEAM preschool protocol, (b) a corresponding vignette of a preschool student, (c) the SEAM Preschool Teaching Guide, and (d) a behavior support plan form (included in the SEAM Preschool Teaching Guide). Participants were instructed to use the protocol, vignette, teaching guide, and behavior support plan form to create a behavior support plan for the student. There was no time limit on writing the support plan. Participants were instructed to use as much time as they needed, and turn it in when they were finished.

Social validity questionnaire. After they completed the second behavior support plan, participants were asked to complete a Likert-scale social validity questionnaire. The questionnaire addressed: (a) how easy the SEAM Preschool Teaching Guide was to use, (b) how useful participants found it to be, and (c) whether or not they would use the SEAM Preschool Teaching Guide in the future.

CHAPTER IV:

RESULTS

Study I: Early Childhood Preservice Teacher Survey

Both quantitative and qualitative analyses were conducted to address research questions for the preservice teacher survey. Quantitative analyses consisted of analysis of variance (ANOVA) for computed survey scores and the calculation of answer percentages and means for ordered and categorical response items. A qualitative thematic analysis was conducted on answers to open-ended questions.

Research Questions 1 and 2

Analyses described in this section addressed the first two research questions:

1. What is the level and quality of preservice training focused on social emotional development and challenging behavior within different types and degree levels of early childhood teacher training programs?
    a. What training have preservice teachers received on social emotional assessment and intervention?
    b. What are the current social emotional/behavioral support strategies implemented by preservice teachers during their teacher training programs?
    c. How prepared do preservice teachers feel to address social-emotional needs and challenging behavior of young children?
2. Are there significant differences in the training, implementation, and preparedness levels of preservice early childhood education teachers based on (a) program type, (b) degree level, and (c) years of experience?

Survey scores. In order to measure and compare levels of training, implementation, and preparedness, a scoring system was created by assigning points to survey items. Training, implementation, and preparedness scores were calculated based on answers to questions included within each of the sub-domains. Descriptive statistics were calculated on survey scores to assess means and standard deviations based on (a) program type, (b) degree level, and (c) years of experience.

The total possible *training* score was 7. Scores ranged from .50 to 6.85, with a mean score of 4.32 (*SD* = 1.44). Table 5 provides training means by program type, level, and years of experience.

Table 5. Means and standard deviations of **training** scores by program type, degree level, and years of experience.

Variable	*n*	*M*	*SD*
Program Type			
ECE	102	3.78	1.37
ECSE	72	4.81	1.39
Dual	50	4.75	1.28
Degree level			
AA	68	3.78	1.44
BA	43	4.44	1.42
MA	113	4.61	1.36
Years of Experience			
0	42	3.88	1.36
1-2	47	4.28	1.51
3-5	55	4.26	1.12
6-9	51	4.68	1.36
10+	29	4.55	1.21

The total possible *implementation* score was 6. Scores ranged from .25 to 5.74, with a mean score of 2.76. Table 6 provides mean implementation scores by program type, degree level, and years of experience.

Table 6. Means and standard deviations of **implementation** scores by program type, degree level, and years of experience.

Variable	*n*	*M*	*SD*
Program Type			
ECE	102	2.44	1.15
ECSE	72	3.00	1.04
Dual	50	3.07	.98
Degree level			
AA	68	2.39	1.19
BA	43	2.97	.98
MA	113	2.91	1.07
Years of Experience			
0	42	2.16	.98
1-2	47	2.71	1.12
3-5	55	2.81	1.12
6-9	51	3.08	1.01
10+	28	4.56	1.21

The total possible *preparedness* score was 28. Scores ranged from 4.53 to 24.25, with a mean score of 14.37 (*SD* = 3.46). Table 7 provides mean preparedness scores by program type, degree level, and years of experience.

Table 7. Means and standard deviations of **preparedness** scores by program type, degree level, and years of experience.

Variable	*n*	*M*	*SD*
Program Type			
ECE	102	14.12	3.92
ECSE	72	14.34	2.89
Dual	50	14.93	3.24

Table 7. (continued).

Variable	*n*	*M*	*SD*
Degree level			
AA	68	14.22	3.99
BA	43	15.65	3.36
MA	113	13.98	3.06
Years of Experience			
0	42	12.61	3.50
1-2	47	13.77	3.77
3-5	55	14.66	3.59
6-9	51	14.99	2.56
10+	28	16.32	2.78

Analysis of Variance

A two-way analysis of variance was used to test for significant differences in the three means (i.e., training, implementation, and preparedness) based on (1) program type, (2) degree level, and (3) years of experience. No significant differences were found in training scores. Results for implementation and preparedness are discussed in turn below.

Results were statistically significant only for implementation means based on years of experience, F (4, 189) = 3.51, p = .009. Results from pairwise Tukey HSD tests, with a Games-Howell adjustment (due to violation of the assumption of homogeneity of variance), indicated that implementation scores of participants with 0 years of experience differed significantly from those with 3-5 years of experience, 6-9 years of experience, and 10 or more years of experience.

Results also indicated that there was a significant interaction between the effects of years of experience and degree level on preparedness scores F (8, 188) = 2.05, p = .042.

Results from pairwise Tukey HSD tests, with a Games-Howell adjustment, indicated that nine of the fifteen simple effects for this interaction were significant. Table 8 details the significant interactions. In general, individuals with Associates degrees and 6-9 years of experience tended to report higher preparedness than do several other groups, while individuals with Bachelor's degrees and 6-9 years of experience tend to report lower preparedness scores than do several other groups.

Table 8. Significant degree and years of experience interactions in **preparedness** scores.

Degree + Years	Degree +Years	*Mean Difference*	*Standard Error*	*p*
AA + 6-9 years	AA + 0 years	5.24	1.15	.013
	AA + 10 or more years	3.80	.83	.016
	BA + 6-9 years	6.91	.86	.000
	BA + 10 or more years	3.16	.66	.044
	MA + 6-9 years	4.83	.82	.002
BA + 6-9 years	BA + 1-2 years	-4.61	1.01	.009
	BA + 10 or more years	-3.74	.74	.002
	MA + 3-5 years	-5.22	1.11	.015
	MA + 10 or more years	-4.72	1.38	.025

Calculated Percentages and Means for Specific Survey Items

In order to further address the first research question, answers and percentages were calculated for specific survey items in each sub-domain. Data were calculated for overall percentages as well as percentages by program type and degree level.

Required Courses. Two survey questions addressed the requirement of specific courses within teacher training programs. Preservice teachers were asked if their program required them to take courses on (1) assessment of young children, and (1) behavior management of young children. The majority of respondents were required to take both types of courses (Figure 4). Overall, 89% percent indicated they were required to take a course on the assessment of young children and 66.8% were required to take a course behavior management of young children. Table 9 presents percentages by program type and degree level.

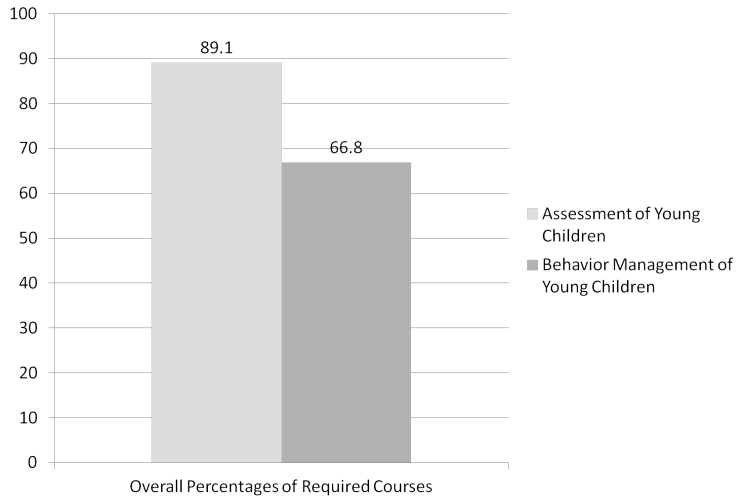

Figure 4. Overall percentages of courses required in teacher training programs.

Table 9. Required course percentages by program type and degree level.

	Program Type			Degree Level		
Course	ECE	ECSE	Dual	AA	BA	MA
Assessment of Young Children	84.9%	94.4%	92%	83.1%	90.9%	92.9%
Behavior Management for Young Children	72.1%	56.9%	70%	67.1%	72.1%	64.6%

Percentages calculated by program type indicated that assessment course requirements ranged from 84.9% for ECE programs, 92% for Dual, and 94.4% for ECSE programs. Behavior management course data showed 72.1% of respondents from ECE programs, 56.9% from ECSE programs, and 70% from Dual programs reported they were required to take such a course.

Percentages for assessment course requirements ranged from 83.1% for Associates-level, 90.9% for Bachelors-level, and 92.9% for Masters-level. Percentages increased slightly as the degree levels became higher. Behavior management course requirements ranged from 64.6% for Masters-level, 67.1% for Associates-level, and 72.1% for Bachelors-level.

Training Questions. Several questions were included in the survey that directly addressed course content. These questions fell within the training sub-domain. Percentages for survey answers within the training sub-domain were calculated to directly address research question 1a: *"What **training** have preservice teachers received on social emotional assessment and challenging behavior?"* Overall percentages for training questions are displayed in Figure 5. Table 10 provides a summary of training

question percentages by both program type and degree level. Further explanation of questions and results follows.

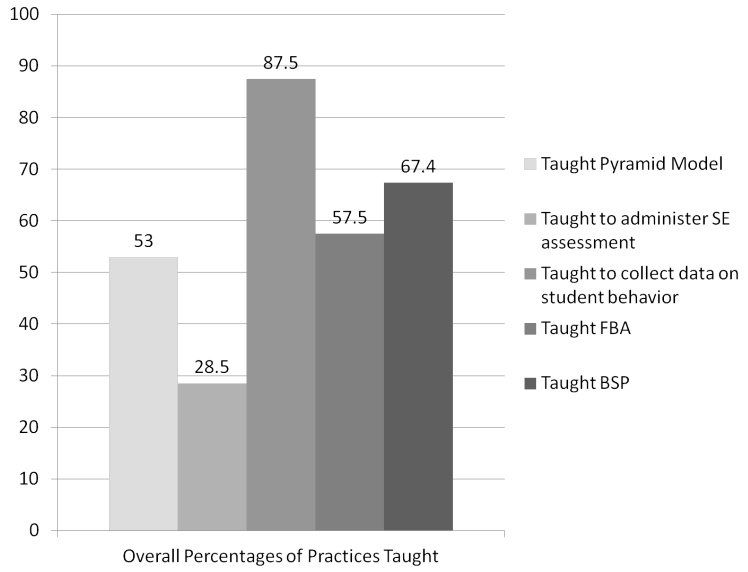

Figure 5. Overall training question percentages for preservice teachers.

Table 10. Training question percentages by program type and degree level.

	Program Type			Degree Level		
Question	ECE	ECSE	Dual	AA	BA	MA
Taught Pyramid Model	38.5%	65.3%	66%	35.7%	55.8%	62.8%
Taught SE assessment	20.8%	31.9%	40%	22.5%	31.8%	31%
Taught to collect data on student behavior	83.3%	90.3%	92%	80.9%	86%	92%
Taught FBA	35.6%	84.7%	82%	35.7%	51.2%	73.5%
Taught BSP	55.9%	84.7%	64%	55.9%	76.7%	73.5%

Pyramid model. One training question specifically addressed whether or not preservice teachers were taught the Pyramid Model for Promoting Social Competence in Infants and Young Children during their teacher training program. Overall, a little over half of survey respondents (53%) reported they had been taught the model. Thirty-eight and a half percent of respondents from ECE teacher training programs indicated they were taught the Pyramid Model in comparison to 65.3% from ECSE programs and 66% from Dual programs. Analysis by degree level revealed 35.7% of respondents from Associates-level program reported being taught the Pyramid Model as compared to 55.8% from Bachelors-level and 62.8% from Masters-level programs.

Assessment and data collection. Survey participants were asked whether or not they had been taught to (1) administer a social-emotional assessment and (2) collect data on children's behavior. Overall, 28.5% percent of respondents reported they were taught to administer a social-emotional assessment during their teacher training program. The majority (87.5%) reported that they had been taught to collect data on student behavior. Analysis by program type indicated that about one-fifth (20.8%) of respondents from ECE programs were taught to administer a social emotional assessment, compared to 31.9% from ECSE programs, and 40% from Dual programs. The majority of students in all types of programs reported that they were taught to collect data on student behavior, ranging from 83.3% in ECE programs, 90.3% in ECSE programs, and 92% in Dual programs.

Percentages calculated by degree level indicated that 22.5% of Associates-level, 31.8% of Bachelors-level, and 31% of Masters-level students were taught to administer a social-emotional assessment. Data regarding whether or not students were taught to

collect data on student behavior indicated that the majority of students received this type of training across degree levels. The percentages became slightly higher as the degree levels increased, with 80.9% of Associates-level students, 86% of Bachelors-level students, and 92% of Masters-level students receiving this training.

Functional behavior assessment and behavior support plans. Respondents were asked if they had been taught to (1) administer a functional behavior assessment (FBA), and (2) create a behavior support plan (BSP). Overall, more than half (57.5%) of respondents indicated they had been taught to conduct an FBA and 67.4% reported they were taught to create a BSP. When analyzed by program type the data indicated that 35.6% of students from ECE programs were taught how to conduct an FBA, as compared to 84.7% of ECSE students, and 64% of respondents from Dual programs. A little more than half (55%) of respondents from ECE programs reported being taught to create a BSP as compared to 73.6 % of students from ECSE programs and 82% from Dual programs

Percentages by degree level revealed that 35.7% of students from Associates-level programs reported being trained to conduct an FBA as compared to 51.2% of students from Bachelors-level programs, and 73.5% from Masters-level programs. BSP data indicated that a little over half of respondents from Associates-level programs (55.9%) were trained to create a BSP as compared to 76.7% from Bachelors-level programs, and 70.8% from Masters-level programs.

Intervention strategies. In order to gather data on specific social emotional/behavioral intervention strategies taught to preservice early childhood teachers, one question on the survey asked participants to mark whether or not they had been trained in eleven different intervention strategies (Table 11). Strategies were

identified through research literature on effective behavior support practices in early childhood (Fox et al., 2003; Dunlap et al., 2006; Hemmeter & Fox, 2008).

Table 11. Specific social-emotional and behavior support practices listed in survey questions.

Level I (universal) and Level II (targeted) social-emotional and behavior support practices
1. Designing the physical environment to prevent challenging behavior (e.g., clearly defined play areas, arranging materials to promote engagement).
2. Creating predictable and balanced schedules and routines to prevent challenging behavior (e.g., consistent schedule, mixture of child-led and teacher-led activities).
3. Establishing clear rules, limits, and consequences to prevent challenging behavior.
4. Using positive feedback (e.g., descriptive praise) and encouragement to support positive behavior.
5. Using specific intentional teaching strategies to teach social-emotional skills (e.g., incidental teaching, peer-mediated instruction).
6. Using choice to prevent challenging behavior.
7. Using prompting and reinforcement to address challenging behavior.
8. Modeling appropriate behavior and labeling of emotions.
9. Using visual aids (e.g., visual schedule, first/then boards, solution cards) to support positive behavior.
10. Teaching children calming techniques (e.g. "Turtle Technique") to help them self-regulate.
11. Helping children identify and choose solutions (e.g., get a teacher, ignore, say "Please stop") to problems they face.

Percentages were calculated to find out how likely participants were to be trained in each of the strategies. Percentages ranged from 65.5% to 97.3%. The three practices students were most likely to have been trained in were (1) using positive feedback and encouragement to support positive behavior (97.3%), (2) creating consistent schedules and routines to prevent challenging behavior (95.6%), and (3) modeling appropriate

behavior and labeling of emotions (90.7%). Responses indicated students were least likely to be taught (1) teaching children calming techniques to help them self regulate and control their feelings (65.5%), (2) helping children identify and choose solutions to problems they face (76.1%), and (3) using specific intentional teaching strategies to teach social emotional skills (77.4%).

Percentages were also calculated by program type and degree level. Data suggested that training percentages of intervention practices were similar across program type, with the exception of three strategies (Table 12). There was more than a 10% difference in percentages between respondents from ECSE and Dual programs on two intervention practices. A higher percentage of ECSE participants indicated they were trained in (1) designing the physical environment, and (2) establishing rules, limits, and consequences. There was also more than a 10% difference between participant responses regarding calming strategies. A larger percent of respondents from Dual and ECE programs reported being taught calming strategies compared to those from ECSE programs.

Table 12. Percentage of intervention strategies **taught** by program type.

	Program Type		
Strategy	ECE	ECSE	Dual
1. Physical environment	87.5	90.3	**78**
2. Schedules and routines	95.2	93.1	100
3. Rules, limits, consequences	87.5	91.7	**78**
4. Positive feedback	96.2	98.6	98
5. Intentional teaching	78.8	79.2	72
6. Choice	89.4	90.3	88

Table 12. (continued).

Strategy	Program Type ECE	ECSE	Dual
7. Prompting and reinforcement	73.1	87.5	78
8. Modeling	94.2	86.1	90
9. Visual aids	86.5	90.3	94
10. Calming techniques	69.2	**55.6**	72
11. Identify and choose solutions	78.8	73.8	74

Note: Items in bold show more than 10% difference from top training percentage.

Percentages by degree level showed more than a 10% difference in percentages between respondents from Bachelors-level programs and those from Associates and Masters-level programs on two intervention practices (Table 13). A higher percentage of Bachelors-level participants indicated they were trained in (1) using specific intentional teaching strategies, and (2) prompting and reinforcement. Masters-level participants scored more than a 10% difference in percentages between both Associates-level and Bachelors-level respondents on two intervention practices. A lower percentage of Masters-level participants reported being trained in (1) designing the physical environment; (2) establishing clear rules, limits, and consequences; and (3) helping children identify and choose solutions.

Table 13. Percentage of intervention strategies **taught** by degree level.

Strategy	Degree level AA	BA	MA
1. Physical environment	92.9	97.7	**77.9**
2. Schedules and routines	92.9	97.7	96.5
3. Rules, limits, consequences	94.3	95.3	**78.8**

Strategy	Degree level AA	BA	MA
4. Positive feedback	97.1	95.3	98.2
5. Intentional teaching	**77.1**	88.4	**73.5**
6. Choice	82.9	90.7	92.9
7. Prompting and reinforcement	**74.3**	88.4	**77.9**
8. Modeling	91.4	90.7	90.3
9. Visual aids	84.3	90.7	92
10. Calming techniques	60	74.4	65.5
11. Identify and choose solutions	81.4	83.7	**69.9**

Note: Items in bold show more than 10% difference from top training percentage.

Implementation. Several questions on the survey addressed whether or not preservice teachers implemented different practices during their practicum and student teaching experiences. Implementation questions coincided with information covered in the training questions. If students indicated they had been trained in a certain practice they were then asked whether or not they had implemented the practice during practicum or student teaching. Calculation of percentages for questions related to implementation specifically addressed research question 1b: ***"****What are the current social emotional/behavioral support strategies* ***implemented*** *by preservice teachers during practicum and student teaching experiences within their teacher training programs?"*

Students were asked whether or not they had (1) administered a social-emotional assessment, (2) collected data on student behavior, (3) conducted an FBA, and (4) created a behavior support plan. Figure 6 shows the overall implementation percentages for each practice. Data indicated that the practice students were most likely to have implemented was collecting data on student behavior, with the majority of respondents (79.5%)

reporting they had done this during practicum or student teaching. Implementation percentages were low for the rest of the practices, with less than half of respondents indicating they had carried them out during their teacher training program. Data were further analyzed to assess if there were differences in specific implementation practices based on program type and degree level (Table 14). Further explanation of results follows.

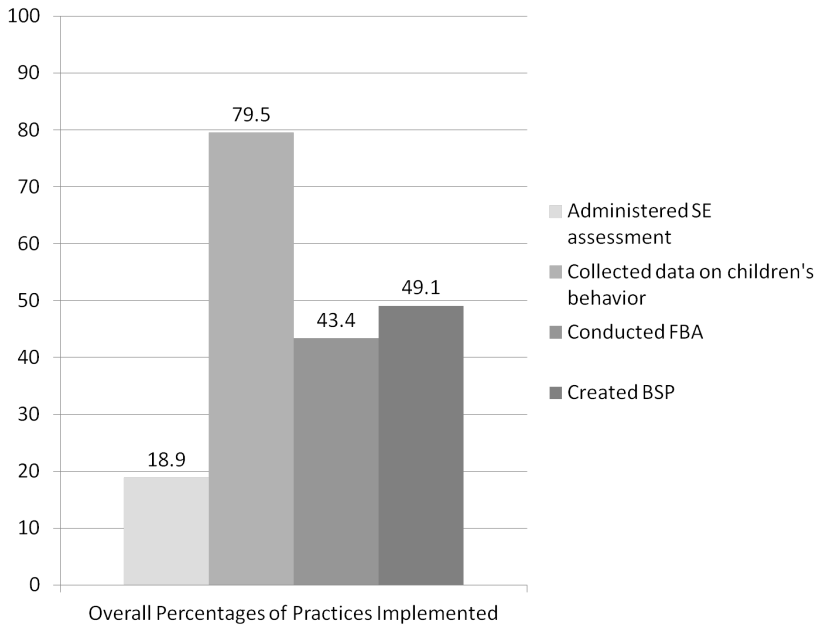

Figure 6. Overall percentages for practices implemented in teacher training programs.

Table 14. Implementation question percentages by program type and degree level

	Program Type			Degree Level		
Question	ECE	ECSE	Dual	AA	BA	MA
Administered SE assessment	13.2%	19.4%	30%	12.7%	13.6%	24.8%
Collected data on student behavior	72.5%	81.9%	90%	69.1%	86%	83.2%
Conducted FBA	83.3%	90.3%	92%	80.9%	86%	92%
Created BSP	55.9%	84.7%	64%	55.9%	76.7%	73.5%

Data by program type indicated that 13.2% of students from ECE programs administered a social-emotional assessment, compared to 19.4% of ECSE students, and 30% of respondents from Dual programs. Respondents' answers regarding data collection suggested the majority of students in all programs (ranging from 72.5% to 90%) collected data on student behavior during practicum and student teaching. Percentages by degree level revealed that less than 25% of respondents in each degree category reported administering a social-emotional assessment during practicum and student teaching (ranging from 12.7% to 24.8%). Percentages for data collection information indicated the majority of students from all degree levels collected data on student behavior.

Participants' answers to the implementation question regarding FBAs revealed that 25.7% of Associates-level respondents reported conducting an FBA during practicum and student teaching compared to 37.2% from Bachelors-level and 56.6% from Masters-level programs. Percentages for BSP data indicated that less than half of respondents from Associates-level programs (36.8%) created a BSP during their teacher

training program compared to 55.8% from Bachelors-level programs, and 54% from Masters-level programs.

Intervention strategies. Overall implementation percentages for the intervention strategies listed in Table 5 ranged from 42.4% to 93%. The three practices that preservice teachers were *most* likely to have implemented during practicum and student teaching were (1) using positive feedback and encouragement to support positive behavior (93%), (2) modeling appropriate behavior and labeling of emotions (84.7%), and(3) using choice to prevent challenging behavior (84.3%). The three practices preservice teachers were *least* likely to have implemented were (1) teaching children calming techniques (42.4%), (2) using specific intentional teaching strategies to teach social emotional skills (62.9%), and (3) helping children identify and choose specific solutions to problems they face (65.5%). Further analysis was done by program type and degree level. Percentages indicated there were four intervention strategies with a larger than 10% difference in implementation by program type (Table 15). Percentages by degree level suggested a larger than 10% difference for nine strategies (Table 16).

Table 15. Percentage of intervention strategies **implemented** by program type.

	Program Type		
Strategy	ECE	ECSE	Dual
1. Physical environment	64.2	69.4	64
2. Schedules and routines	69.8	66.7	68
3. Rules, limits, consequences	74.5	77.8	70
4. Positive feedback	90.6	95.8	96
5. Intentional teaching	61.3	63.9	66
6. Choice	83	86.1	86

Table 15. (continued).

Strategy	Program Type ECE	ECSE	Dual
7. Prompting and reinforcement	**66**	86.1	76
8. Modeling	88.7	**76.4**	90
9. Visual aids	**70.8**	**76.4**	88
10. Calming techniques	49.1	**31.9**	44
11. Identify and choose solutions	78.8	73.8	74

Note: Items in bold show more than 10% difference from top implementation percentage.

Table 16. Percentage of strategies **implemented** by degree level.

Strategy	Degree level AA	BA	MA
1. Physical environment	**63.4**	81.8	**61.1**
2. Schedules and routines	**71.8**	86.4	**59.3**
3. Rules, limits, consequences	**77.5**	88.6	**67.3**
4. Positive feedback	90.1	90.9	96.5
5. Intentional teaching	**57.7**	72.9	**62.8**
6. Choice	**73.2**	88.6	90.3
7. Prompting and reinforcement	**66.2**	84.1	**76.1**
8. Modeling	83.1	88.6	85
9. Visual aids	**66.2**	79.5	81.4
10. Calming techniques	**45.1**	61.4	**33.6**
11. Identify and choose solutions	**70.4**	81.8	**56.6**

Note: Items in bold show more than 10% difference from top implementation percentage

Preparedness. Survey questions related to preparedness were all ordered-response (Likert-scale) questions with the following ratings: (1) not at all prepared (score of 0), (2) slightly prepared (score of 1), (3) moderately prepared (score of 2) and (4) extremely prepared (score of 3). Calculation of means for questions related to preparedness specifically addressed research question 1c: *How **prepared** do preservice teachers feel to address social-emotional needs and challenging behavior of young children?*

Participants were asked to rate how well-prepared they felt to independently (1) choose an appropriate social-emotional assessment, (2) administer a social emotional assessment, (3) conduct an FBA, and (4) create a BSP (Figure 7). Respondents overall mean rating for *choosing* an assessment was 1.61 (*SD* = .81). The mean rating for *administering* a social emotional assessment was 1.62 (*SD* = .87). Respondents overall mean rating for conducting an FBA was 1.88 (*SD* = 1.00) and the mean rating for creating a BSP was 1.72 (*SD* = .91). All of the mean rating scores indicated that overall respondents felt between slightly to moderately prepared. Mean preparedness ratings were also analyzed by program type and degree level (Table 17). Further explanation of results follows.

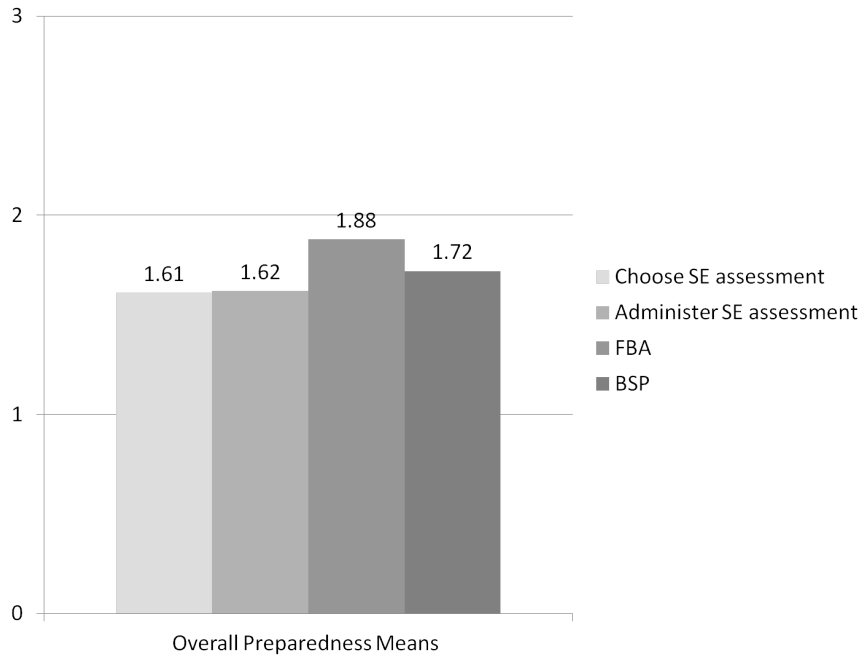

Figure 7. Overall preparedness means.

Table 17. Mean **preparedness** question ratings by program type and degree level.

	Program Type			Degree Level		
Question	ECE	ECSE	Dual	AA	BA	MA
Choose SE assessment	1.64	1.54	1.62	1.61	1.79	1.53
Administer SE assessment	1.63	1.51	1.76	1.54	1.88	1.57
Conduct FBA	1.88	1.85	1.94	1.91	1.81	1.88
Create BSP	1.53	1.78	2.02	1.59	1.98	2.02

Note: Rating scores 0=not at all, 1=slightly, 2=moderately, 3=extremely

Preparedness ratings for both *choosing* and *administering* a social emotional assessment were similar across program types and degree levels, with all mean scores in between the slightly to moderately prepared range (M = 1.51 to M = 1.88). Preparedness ratings for conducting an FBA were also similar across program types with mean scores

falling in between the slightly to moderately prepared range (M = 1.88 to M = 1.94). Data showed a slight difference in BSP ratings. Mean ratings for both ECE and ECSE respondents fell in between slightly to moderately prepared (M = 1.53 and M = 1.78), whereas the mean rating for participants from Dual programs indicated they felt moderately prepared (M = 2.02).

FBA ratings were similar across degree levels with mean scores in between the slightly to moderately prepared range (M = 1.81 to M = 1.91). Data showed a slight difference in BSP ratings. Mean ratings of participants from Associates-level programs fell in between the slight to moderately prepared categories (M = 1.59). The mean rating for Bachelors-level programs also fell in between the slightly to moderately prepared categories (M = 1.98) but was very close to the moderately prepared category. The mean rating for participants from Masters-level programs indicated they feel moderately prepared to create a BSP (M = 2.02).

Participants were asked to rate how well-prepared they felt to independently carry out the identified intervention practices. Mean ratings ranged from 1.6 to 2.64. Survey respondents felt most prepared to (1) use positive feedback and encouragement to support positive behavior (M = 2.64), (2) model appropriate behavior and labeling of emotions (M = 2.47), and (3) create predictable and balanced schedules and routines to prevent challenging behavior (M = 2.42). Respondents felt least prepared to (1) teach children calming techniques to help them self-regulate (M = 1.60), (2) Use specific intentional teaching strategies to teach social-emotional skills (M = 1.90), and (3) help children identify and choose solutions to problems they face (M = 2.01). Mean preparedness ratings by program type and degree level are detailed in Table 18 and Table 19.

Table 18. Mean **preparedness** ratings by program type.

Strategy	Program Type ECE	ECSE	Dual
1. Physical environment	2.15	2.08	1.94
2. Schedules and routines	**2.38**	**2.37**	**2.54**
3. Rules, limits, consequences	2.35	**2.36**	2.10
4. Positive feedback	**2.58**	**2.78**	**2.54**
5. Intentional teaching	1.95	1.90	1.78
6. Choice	2.37	**2.36**	2.28
7. Prompting and reinforcement	1.92	2.31	2.06
8. Modeling	**2.52**	2.35	**2.54**
9. Visual aids	2.10	2.15	2.38
10. Calming techniques	1.75	1.31	1.70
11. Identify and choose solutions	2.10	1.89	1.98

Note: Items in bold indicate strategies with the three highest means for each program type.

Table 19. Mean **preparedness** ratings by degree level.

Strategy	Degree level AA	BA	MA
1. Physical environment	2.30	2.50	1.79
2. Schedules and routines	2.33	**2.65**	**2.38**
3. Rules, limits, consequences	**2.53**	**2.63**	2.04
4. Positive feedback	**2.65**	**2.67**	**2.62**
5. Intentional teaching	1.90	2.33	1.73
6. Choice	2.26	2.53	2.33
7. Prompting and reinforcement	1.97	2.40	2.03

Table 19. (continued).

Strategy	Degree level AA	BA	MA
8. Modeling	**2.41**	2.49	**2.50**
9. Visual aids	2.07	2.33	2.19
10. Calming techniques	1.50	1.98	1.51
11. Identify and choose solutions	2.16	2.30	1.81

Note: Items in bold indicate strategies with the three highest means for each program type.

Research Questions 3 and 4

Two open-ended survey questions directly addressed research questions 3and 4:

3. What challenges do preservice teachers face in addressing social-emotional development and implementing behavioral support strategies?
4. What materials and supports do preservice teachers want in order to successfully foster young children's social emotional development and effectively implement behavioral support strategies when they enter the workforce?

Answers were coded for themes using a structural coding process (Saldaña, 2009). Once themes were coded they were independently reviewed by two doctoral students in order to assess whether or not (1) the themes seemed complete, and (2) survey answers were classified under the correct theme. Minor changes in themes were made based on feedback from the independent reviews.

Question 1. One hundred and sixty five survey respondents (72%) answered the first open-ended question: "What is your biggest concern about addressing the social-emotional needs and behavioral challenges of young children when you begin working

within the early childhood field?" Eleven themes were identified from the responses. The three themes with the highest number of responses were (1) inability to identify and carry out appropriate and effective interventions, (2) having adequate support and resources to address social-emotional/behavioral needs of children, and (3) collaboration with parents. Table 20 provides a summary of the themes and examples of respondent answers.

Table 20. Summary of themes identified for question 1: Biggest concern about addressing social-emotional needs and behavioral challenges.

Theme	Number of Respondents	Examples of Survey Data
1. Inability to identify and carry out an appropriate and effective intervention	(*n* = 41)	"To be able to identify and apply the right course of action for each child/situation." "How to implement a different intervention if the first intervention does not work and figure out which method works for the particular child."
2. Having adequate support and resources to address SE/behavioral needs of children	(*n* = 31)	"My biggest concern is what to do when you have exhausted all possible steps you can take as a classroom teacher in regards to helping the student with social or emotional need and it becomes clear that they need additional support and administration is dragging their feet or not giving you the support you need." "Not having a support system when I need it. Not having someone to help with strategies and techniques that can be used to help with the challenges associated with social-emotional needs and challenging behaviors."
3. Collaboration with parents	(*n* = 30)	"How to express my concerns to the family in a positive way. If we have an issue in the classroom I want everyone to be on the same page to help our student excel to his/her full potential."

Table 20. (continued).

Theme	Number of Respondents	Examples of Survey Data
		"My biggest concern is getting the family to support the strategies that are being used in the classroom, and the families being open about the child having challenging behaviors."
4. Inability to appropriately assess the social-emotional/behavioral needs of the child	(*n* = 20)	"Correctly identifying the need for assessment; selecting the correct tool for assessment and intervention."
		"Identifying the trigger for the behavior."
5. Impact of child's behavior on others	(*n* = 14)	"The possibility of neglecting some students because I am so focused on the child with behavioral challenges."
6. Dealing with specific behaviors or diagnoses	(*n* = 12)	"Working with children diagnosed with oppositional defiant disorder."
7. Lack of training and experience in behavioral interventions	(*n* = 5)	"I have not been trained specifically how to handle difficult children."
8. Lack of confidence	(*n* = 5)	"Feeling confidence in myself to resolve the situation."
9. Policy/Law Issues	(*n* = 3)	"What standards and policies should be followed to address the extreme needs and behavior challenges in ECE."
10. Establishing a positive relationship with a child who has SE/Behavioral issues	(*n* = 2)	"I worry that the child will not allow me to establish a relationship with him/her."
11. Balance between addressing SE needs and academics	(*n* = 2)	"School districts often focus solely on Data & progress on Goals, where I think supporting the social & emotional needs of the children should be priority, not data on academic goals."

Question 2. One hundred and fifty six survey respondents (68%) provided answers to the second open-ended question: "What type of support around social-emotional/behavior skills assessment and intervention would be helpful to you when you begin working in the field of early childhood education?" Nine themes were identified from the answers. The three themes with the highest number of responses were (1) resources on specific interventions and guidelines for practice, (2) mentoring, and (3) more resources and training on social emotional/behavioral assessment. Table 21 provides a summary of themes along with examples of respondent answers.

Table 21. Summary of themes identified for question 2: Type of support wanted around social-emotional/behavioral skills assessment and intervention.

Theme	Number of Respondents	Examples of Survey Data
1. Resources on specific interventions and guidelines for practice	(*n* = 26)	"A book that details a process or procedure to follow in creating appropriate interventions." "Actual strategies to try that are all in one place or one resource." "Plans or documents that help score or assess different social-emotional/behavior skills AND appropriate techniques on how to intervene."
1. Mentoring	(*n* = 23)	"Mentor teachers to help with identification of appropriate interventions or resources for selecting evidence-based practices." "A more experienced teacher walking through the assessments and interventions for a while until I get better at it."

Table 21. (continued).

Theme	Number of Respondents	Examples of Survey Data
2. More resources and training on social emotional/behavioral assessment	(*n* = 23)	"More direction about different types of assessment and how to administer them and then use the results." "Assessments that could be linked to strategies and goals."
3. Continued training on social emotional/behavioral interventions	(*n* = 19)	"I would like to attend more trainings that specifically train teachers on this topic. I think it is important that children learn early on to develop positive social-emotional skills. I feel like most teachers do not know how to handle difficult children in a positive manner or have the ability to help them." "PBIS trainings."
4. More active observation and practice of social emotional/behavioral interventions	(*n* = 19)	"Actually seeing how the behavior support plan can be implemented in an actual classroom as well as working at sites with challenging students."
5. Consultation and coaching	(*n* = 12)	"Being able to actually assess and intervene with a child while I have a coach there to guide me or tell me a different way to handle a situation and reinforce when I am doing things correctly."
6. Administrative and team support	(*n* = 12)	"It would be helpful if the administration and the classroom teacher could be on the same page."
7. Collaboration with other teachers	(*n* = 8)	"It would be helpful to have 'support groups' where teachers can discuss what they are doing in their class with similar situations."
8. Trained support staff	(*n* = 8)	"Well trained paraprofessional."
9. Support from families	(*n* = 6)	"Family and teacher collaboration."

Study II: Behavior Support Plan Study

Quantitative analyses were conducted to address the research question "is there a significant difference between the quality of behavior support plans written by preservice teachers independently and those written using the SEAM Preschool Teaching Guide?" A two-way repeated measures ANOVA was used to compare differences in pre- and post-test quality scores based on both program type and program level. Mean scores were also calculated for answer ratings on a social validity questionnaire in order to assess preservice teachers' opinions about the SEAM Preschool Teaching Guide.

Behavior Support Plan Scores

The behavior support plans were scored by three trained doctoral students using a scoring sheet and rubric to rate the plans on several criteria including whether identified strategies linked to SEAM results and were evidence-based. A score between 0 to 3 was given for each component. The numbered score coincided with the following ratings: missing capacity (0), developing capacity (1), initial proficiency (2), and proficiency (3). The scoring guide provided specific criteria for each rating. Both individual component scores and a total composite score were calculated for each behavior support plan. The highest possible composite score was 21. An interobserver agreement (IOA) of 90.25% was calculated for 32% of the behavior support plans.

Repeated-Measures ANOVA

A two-way repeated-measures ANOVA was conducted to examine the effects of time (pre and post) and degree level (AA, BA, MA) on behavior plan quality scores. A statistically significant interaction was found between time and degree level, $F(2, 22) = 6.39$, $p < .05$ (see Table 22 for means and *SD*s). The results indicated that the teaching

guide intervention significantly improved the behavior support plan quality scores of preservice teachers from all degree levels, but those from Associates-level programs benefited significantly more than those from other degree programs (Figure 8).

A planned comparison between program types (ECE and ECSE) was also conducted to assess whether there was a significant difference in quality scores based on time and program type. Specifically, the pooled mean improvement for AA and BA preservice teachers together (i.e., these two groups were both engaged in ECE programs) was compared to the mean improvement for MA preservice teachers, who were exclusively enrolled in ECSE programs. A statistically significant interaction was found between time and program type, $F(1, 22) = 7.80$, $p < .05$. Table 23 displays mean quality scores by time and degree level. Results indicated that the quality of behavior support plan scores increased significantly more from pre-intervention to post-intervention for ECE preservice teachers than for ECSE preservice teachers, specifically by about 3.5 points.

Table 22. Behavior support plan pre and post means and standard deviations by degree level.

Time	Degree Level		
	AA (n = 6)	BA (n = 6)	MA (n = 13)
Pre	6.17 (3.06)	9.17 (1.94)	11.77 (3.06)
Post	19.33 (1.37)	18.33 (4.18)	19.46 (1.20)

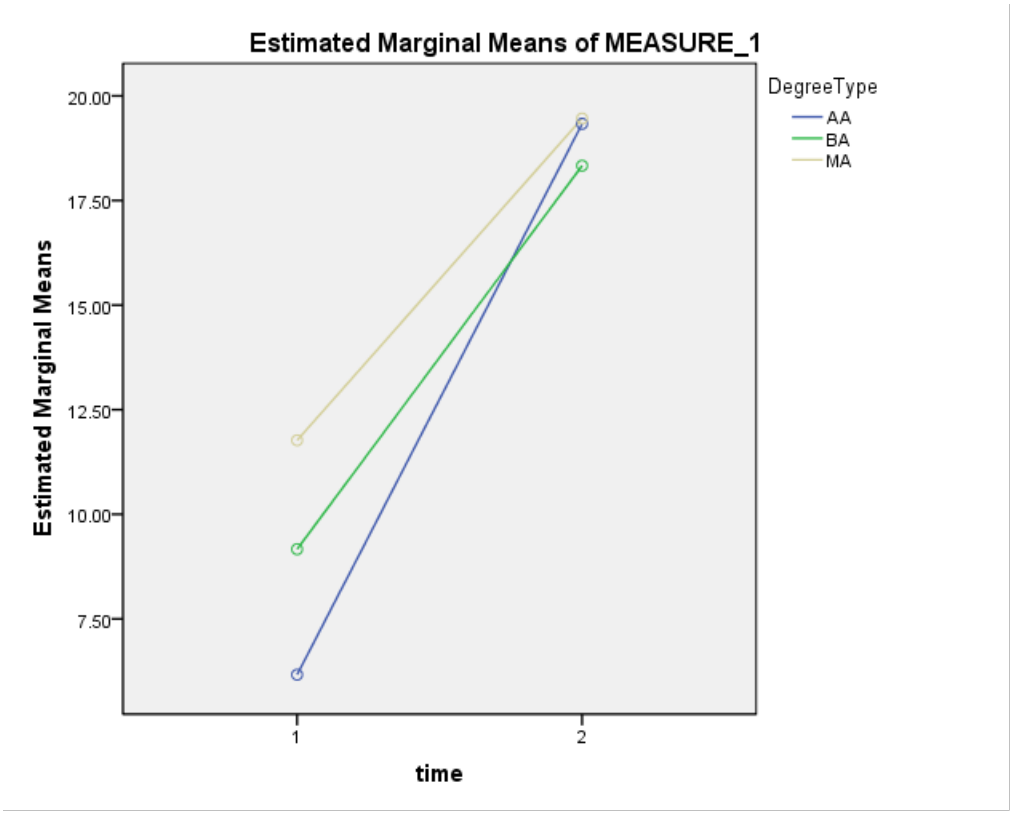

Figure 8. Interaction effects of time and degree level on BSP quality scores.

Table 23. Behavior support plan pre and post means and standard deviations by program type.

	Program Type					
	ECE			ECSE		
Time	*n*	*M*	*SD*	*n*	*M*	*SD*
Pre	12	7.67	2.90	13	11.77	3.06
Post		18.83	3.01		19.46	1.20

Social Validity. Answers from the social validity questionnaire were analyzed to assess the mean score for each question. Possible score ratings for each question were 0

(not at all), 1 (slightly), 2 (moderately), and 3 (extremely). The following table details the means and standard deviations for each question.

Table 23. Social validity ratings for the SEAM preschool teaching guide.

Question	*M*	*SD*
1. How ***easy*** was the *SEAM Preschool Teaching Guide* to understand?	2.76	.44
2. How ***easy*** was it to link assessment results from the SEAM protocol to interventions in the *SEAM Preschool Teaching Guide*?	2.64	.57
3. How ***easy*** was the behavior support plan (BSP) form to use?	2.68	.63
4. How ***useful*** was the behavior support plan form (BSP) in helping you create a behavior support plan?	2.84	.37
5. How ***useful*** was the *SEAM Preschool Teaching Guide* in helping you identify appropriate interventions for the child described in the vignette?	2.80	.41
6. How ***likely*** would you be to use the *SEAM* (the actual assessment) when working in a preschool classroom as either a teacher or a consultant?	2.80	.41
7. How ***likely*** would you be to use a resource like the *SEAM Preschool Teaching Guide* when working in a Preschool classroom as either a teacher or a consultant?	2.92	.28

**Ratings were scored as 0 (not at all), 1 (slightly), 2 (moderately), and 3 (extremely)*

The overall means were high for all questions, ranging from 2.64 to 2.92, which falls between the moderately to extremely ratings. The lowest ratings were regarding how easy it was to link assessment results to interventions in the teaching guide (2.64) , and how easy the behavior support plan form was to use (2.68). The highest ratings were for

how likely participants would be to use the teaching guide in a preschool classroom (2.92), and the usefulness of the behavior support plan form (2.84).

Two open-ended questions were included at the end of the social validity survey. The first question asked participants if any improvements could be made to the SEAM Preschool Teaching Guide to make it easier to use. Eight participants (32%) provided responses. Suggestions focused on providing more (1) examples of specific strategies, (2) ideas and guidance on how to monitor a child's progress, (3) suggestions on feedback and consequences that could be provided to children, and (4) examples of how to fill out the behavior support plan. Other suggestions were to include a family component, and create an online resource for the teaching guide.

The second open-ended question allowed participants to provide any other comments they wanted to share. Thirteen participants (52%) provided answers. Comments indicated that participants thought the teaching guide was straightforward and clear, provided relevant examples, and would be useful as a resource for both teachers and consultants. Participants also stated that the behavior support plan form included with the teaching guide made it much easier for them to create a BSP.

CHAPTER V

DISCUSSION

Study I: Early Childhood Preservice Teacher Survey

The early childhood preservice teacher survey study was designed to gather information on the training experiences, implementation practices, and level of preparedness of preservice teachers graduating from their programs. Preservice teachers from a variety of program types (ECE, ECSE, Dual) and degree levels (AA, BA, MA) were included in the study in order to compare differences and identify trends across programs. This section includes a discussion of the main findings from the study, limitations, and ideas for future research.

Discussion and Future Directions

Results from this survey add to the literature on early childhood teacher training related to how well preservice programs prepare students to conduct social emotional/behavioral assessment and intervention. Overall, the survey results provide additional evidence of the need for enhanced training efforts in this area. In particular, results suggested (1) years of experience influenced preservice teachers' preparedness and implementation practices, (2) early childhood preservice teachers need more training on social emotional assessment practices, (3) trends in training and implementation can be seen by program type and program level, and (4) preservice teachers felt slightly to moderately prepared to implement social emotional assessment and intervention practices.

Implementation and Preparedness Scores. The differences in implementation and preparedness scores based on years of experience indicate early childhood educators

may need a certain amount of time in the field before they feel confident enough to implement social emotional/behavioral assessment and intervention practices. An important factor in making sure teachers gain that experience is ensuring they receive adequate support to stay in the profession. Research shows that most teachers remain in the profession for less than five years (Anhorn, 2008) and teacher turn-over rates in early childhood education are alarmingly high (Whitebook, Sakai, Gerber & Hayes, 2001). Therefore, in order for to teachers to gain the experience needed to feel competent in carrying out social emotional/behavioral interventions adequate support systems and resources need to be in place (Blair et al., 2010; Carter et al., 2010; Duda et al., 2004)

Survey Responses. Response percentages for specific survey questions provided more detailed data on the breadth and type of social emotional assessment and intervention content within early childhood preservice training programs. Some of the data also revealed certain trends based on program type and degree level.

Training. Results regarding required courses indicated the majority of respondents were required to take an assessment course (89.1%) regardless of their program type or degree level. However, even though most students had taken an assessment course, data showed that a surprisingly low percent were taught to administer a social emotional assessment (28.5%). These data suggest that although assessment is a focus of early childhood preservice training programs, content on social emotional assessment may not be a priority. Despite the fact that data on social emotional assessment training were extremely low for all program types, data indicated that programs with a special education component may be more likely to train students in this practice (Figure 9).

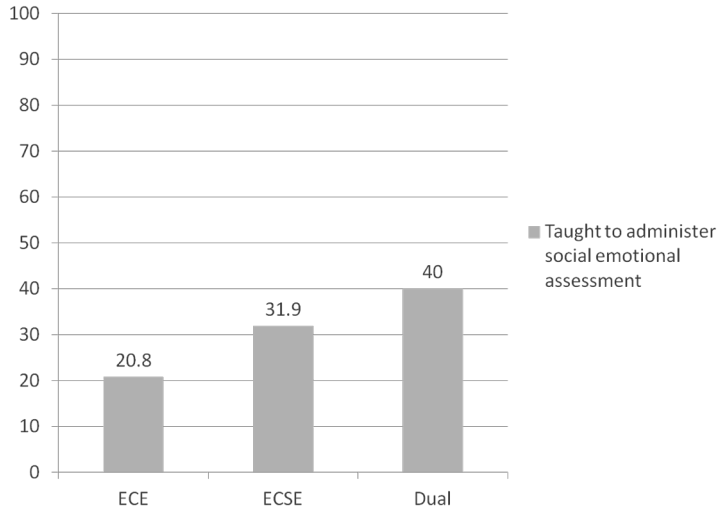

Figure 9. Social emotional assessment data by program type.

Survey results indicated that overall 66.8% of respondents were required to take a course on the behavior management of young children. Even though this suggested the majority of students were required to take such a course, it also indicateed it was not an essential requirement of all early childhood programs. Program type data showed that only 56.9% of preservice teachers from ECSE programs reported being required to take a course on the behavior management of young children. These results appear to be surprising. One possible reason for the low ECSE percentage is that these programs may require a more general behavior management course through their Special Education departments. General behavior management courses are typically aimed at the school age population rather than young (preschool-age) children. Therefore, when asked if they were required to take a course "*specifically on behavior management of **young** children,*" respondents who took a general behavior management course would likely respond no. It would be important to assess for these differences in future research on behavior course requirements.

Since the Pyramid Model is currently the main framework used in early childhood research on positive behavior support, the survey included a question on whether or not preservice teachers had been taught this model. Overall only 53% of respondents reported they had received training on the Pyramid Model during their teacher training program. This suggests that knowledge of the Pyramid Model is still developing within the field.

Percentages by program type and degree level suggested other trends. There was a 25% or more difference in the percentage of students trained in the Pyramid Model between students in ECSE or Dual programs compared to those in ECE programs (Figure 10). These results indicated programs with a special education component were more likely to train preservice teachers within the Pyramid Model framework. Data by degree level showed a 20% or higher difference between preservice teachers in Associates-level programs compared to those in Bachelors-level and Masters-level programs (Figure 11). These results indicated that degree level may also have influenced whether or not preservice teachers were taught the Pyramid Model, with percentages increasing as degree level became higher.

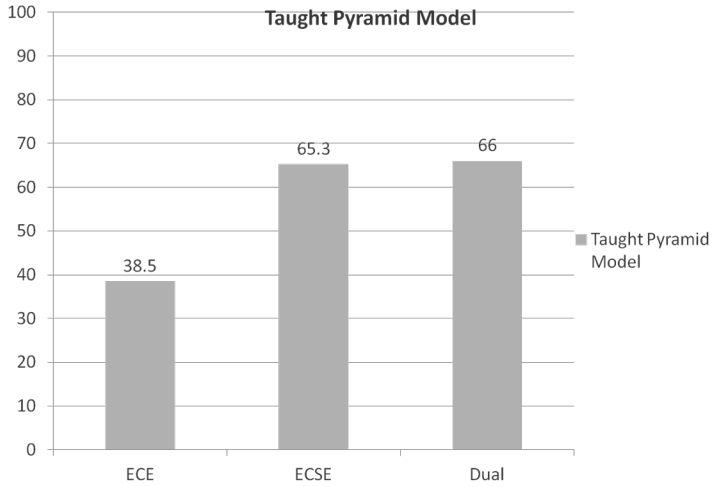

Figure 10. Pyramid model by program type.

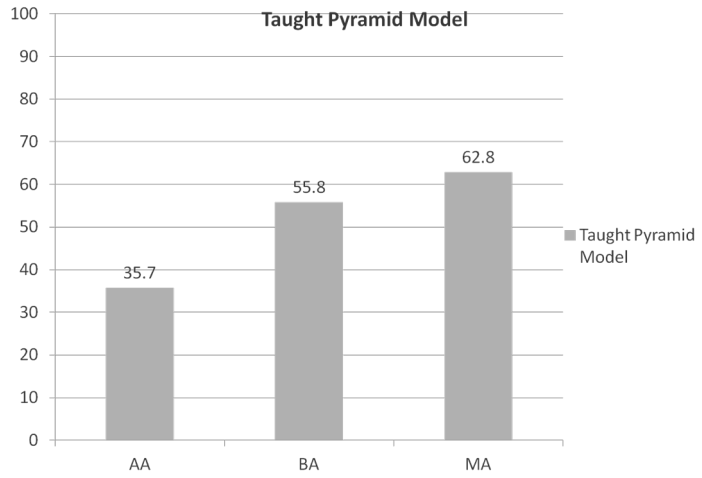

Figure 11. Pyramid model by degree level.

The purpose of the Pyramid Model is to provide practitioners with a cohesive framework to view social emotional/behavioral assessment and intervention practices. However, the data suggests there is a research to practice gap with this model. Having a cohesive framework for training teachers in social emotional/behavioral assessment would benefit the early childhood field. Practitioners from different types of programs could more easily communicate about strategies and intervention. More information is needed on how the Pyramid Model is currently promoted within the early childhood field. This information could be used to identify ways to assist personnel preparation programs in training preservice teachers within this framework.

Data regarding training on FBAs indicated that, overall, only 57.5% of respondents were taught how to conduct an FBA. This finding is consistent with other research on early childhood behavior intervention training that shows early childhood practitioners are not sufficiently trained in this practice (Hojnoski & Wood, 2012; Wood et al., 2009, Wood et al., 2011). Data revealed trends by program type and degree level.

Students enrolled in programs containing a special education component appeared much more likely to have received training on FBAs (Figure 12). The likelihood of preservice early childhood teachers to be taught to conduct an FBA also appeared to increase as the degree level became higher (Figure 13).

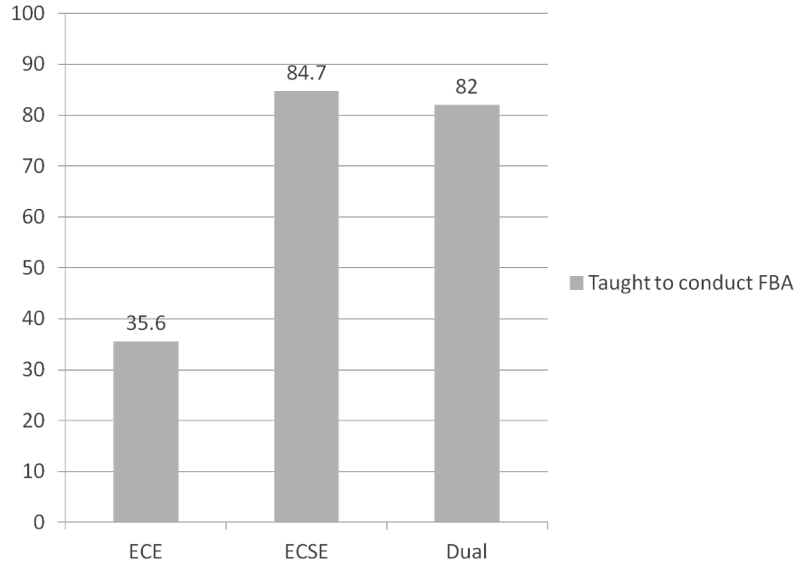

Figure 12. Percentage of students taught to conduct FBA by program type.

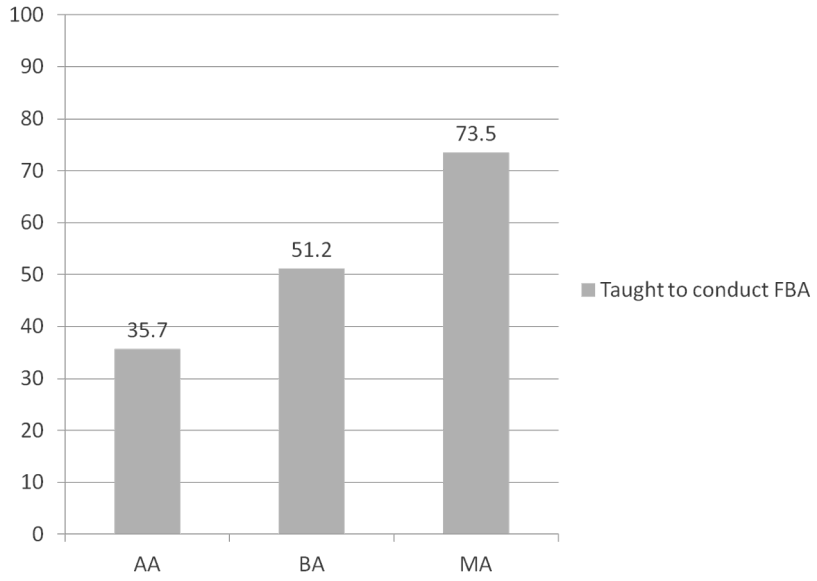

Figure 13. Percentage of students taught to conduct FBA by degree level.

Overall 67.4% of students reported being taught to create a BSP. Although this revealed the majority of students were taught this practice, it still indicated that over 30% of students had not been taught how to create a BSP. Preservice teachers enrolled in ECE programs had the lowest percentage (Figure 14). Data by degree level indicated students in higher level programs were more likely to be trained to create a BSP (Figure 15).

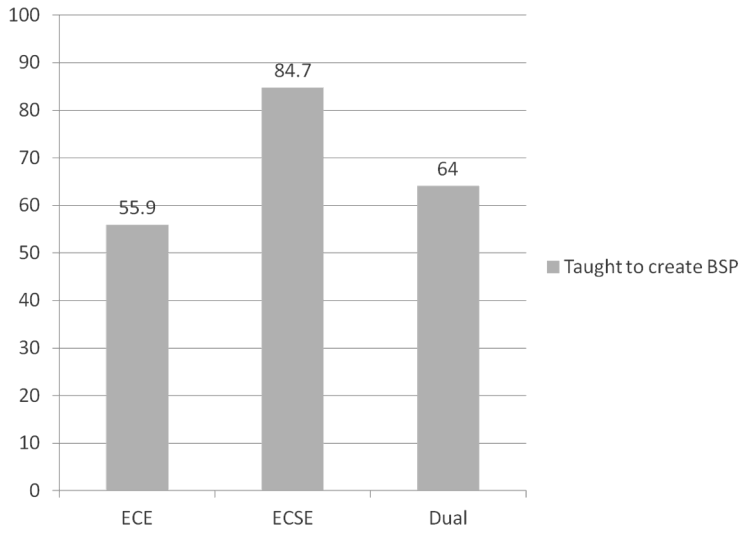

Figure 14. Percentage of students taught to create BSP by program type.

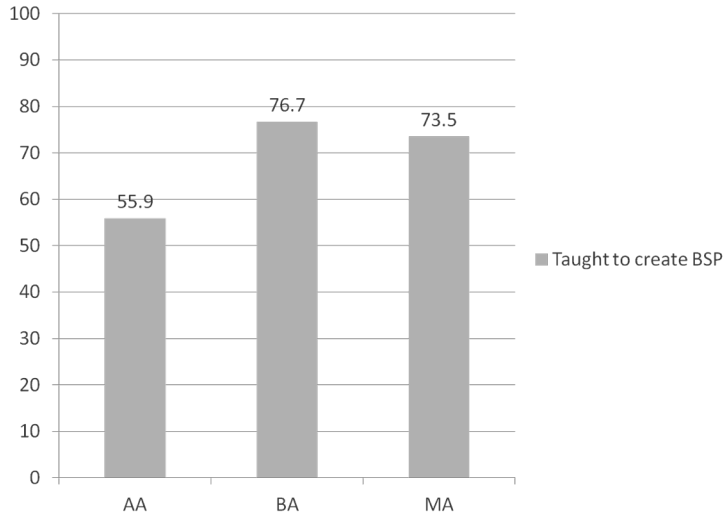

Figure 15. Percentage of students taught to create BSP by degree level.

It is not surprising that special education programs appeared more likely to train preservice teachers to conduct these practices. FBAs and BSPs are typically used with children who exhibit the most challenging behavior (Level III interventions). In practice, ECSE specialists are usually the resource person early childhood practitioners consult

with when a child is exhibiting challenging behavior. Therefore, it is important that ECSE students are trained to conduct these practices. Unfortunately, not all early childhood practitioners have access to ECSE or behavior specialists, and those that do often receive support on a limited consultation basis. Due to the rising rates of preschool expulsion, and decreased funding for early childhood programs (including specialist services), it is important that early childhood teachers from all backgrounds have training in FBAs and BSPs. Having adequate knowledge will allow practitioners to understand recommendations from specialists, and apply practices themselves when specialists are not available.

Training percentages for specific Level I and Level II intervention strategies indicated that overall early childhood teachers were taught these universal and targeted interventions. Some differences were indicated by degree level. Interestingly, preservice teachers enrolled in Bachelors-level programs appeared to receive the most consistent training across interventions. This may reflect the difference in program length. Bachelors-level programs are typically four-years long, whereas Associates and Masters-level programs tend to be between one to two years in length. Therefore, more content on intervention strategies may be covered in Bachelors-level programs simply due to having more time to teach it to students. Studies comparing two-year and four-year teacher training programs have found differences in training based on length of program (Hemmeter et al., 2008). Since early childhood personnel preparation programs have a wide range of program lengths, it would be beneficial to further assess the effect of program length on social emotional/behavioral assessment and intervention. This would not only help assess effects of length on *different* degree level programs (e.g., two-year

Associates-level versus four-year Bachelors-level), but effects of length on programs resulting in a degree at the *same* level (e.g., one-year Masters-level versus two-year Masters-level).

Implementation. The first step in learning how to carry out social emotional assessment and intervention practices is being taught the practices. However, research indicates that the most vital step is actual implementation of practices (Durlak & DuPre, 2008; Fixsen et al., 2005). Therefore, it is important to analyze not only what preservice teachers have received training on in classes, but whether or not they actually carried out practices within student teaching and practicum sites. Percentages for implementation questions revealed many gaps in application of practices. In particular, the percentage of respondents who reported conducting a social emotional assessment was extremely low (18.9%)

Less than half of survey respondents reported conducting an FBA (43.4%) and creating a BSP (49.1%) during their teacher training programs. Percentages by program type indicated that students enrolled in programs with a special education component were more likely to have administered a social emotional assessment, conducted an FBA, and created a BSP (Figure 16). Even though respondents from programs with a special education component were more likely to have students implement these practices, the percentages were still very low. This is particularly concerning since ECSE specialists are typically the ones called upon to implement FBAs and BSPs within the field.

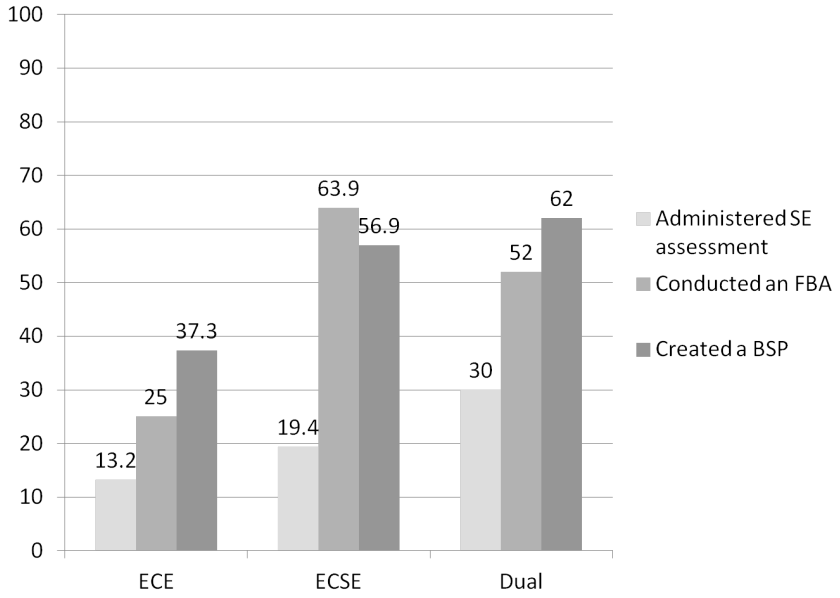

Figure 16. Implementation percentages by program type.

The likelihood that respondents conducted an FBA or BSP during practicum or student teaching also appeared to increase as degree level became higher (Figure 17). More than twice as many students from Masters-level (56.6%) programs reported conducting an FBA compared to those from an Associates-level (25.7%) program. There was more than a 15% difference in BSP implementation percentages between preservice teachers from Associates-level programs and those from Bachelors-level or Masters-level programs.

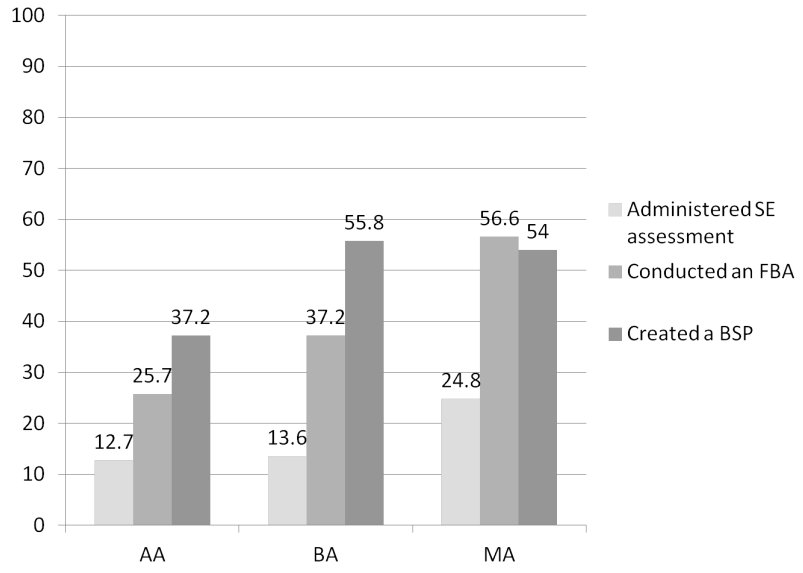

Figure 17. Implementation percentages by degree level.

Although the survey provided data on the practices preservice teachers implemented during practicum and student teaching it did not provide any information on the amount and quality of implementation. Research highlights the importance of implementation fidelity (Durlak & DuPre, 2008; Fixsen, Naoom, Blasé, Friedman, & Wallace, 2005; Hamre et al., 2010). Incorrect or incomplete implementation of strategies can lead to inconsistent outcomes for young children, and incorrect assumptions about whether or not a strategy works. Feedback from trained supervisors or coaches is particularly important in ensuring practices are implemented with fidelity (Carter et al., 2010). Further research is needed on the type of feedback and support students are given during implementation of social emotional/behavioral assessment and intervention practices.

Classroom Learning and Implementation Gap. Comparison of training and implementation percentages revealed a gap between practices students were taught within

their teacher training programs and implementation of them during practicum and student teaching (Figure 18). Data indicated that this gap exists regardless of program type or level. As stated earlier, implementation of practices is important in guaranteeing preservice teachers learn to implement them correctly.

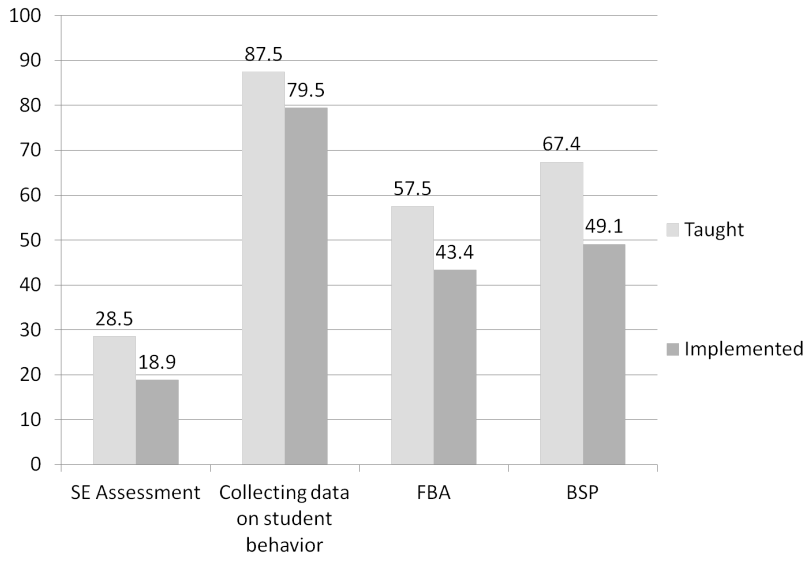

Figure 18. Overall percentages of practices taught and implemented.

Preparedness. The goal of early childhood teacher training programs is to ensure practitioners are adequately prepared to meet classroom challenges once they enter the field. Since early childhood practitioners report challenging behavior as one of the largest reasons for leaving the field (Gebbie et al., 2012; Hastins & Bham, 2003) it is important to make sure they come out of their training programs feeling prepared to address social emotional/behavioral needs. Overall preparedness ratings indicated that respondents felt in between slightly to moderately prepared to independently implement social emotional/behavioral assessment and intervention practices. This contrasts with research

concerning early childhood education faculty's perspective on the subject. In a survey asking faculty to rate how prepared their students were to design and implement interventions to address challenging behavior, overall faculty ratings indicated they felt their students were highly prepared (Hemmeter et al., 2008). These findings suggest early childhood education programs would benefit from gathering more student feedback on how well their programs are training them to address emotional/behavioral assessment and intervention. Program assessment of training practices can be used to better support preservice teachers. The data also suggest new early childhood practitioners need additional inservice support to carry out these practices successfully.

One of the most surprising results regarding levels of preparedness was that preservice teachers felt about equally prepared regardless of program type or degree level. Even though percentages indicated certain differences in training and implementation based on program type or degree level, these differences didn't appear to have impacted how well prepared students felt. For example, questions regarding training and implementation of FBAs revealed 35.7% of Associates-level students reported being trained in the practice, and 25.7% conducted one during practicum and student teaching. In contrast, 70.8% of Masters-level students reported being trained to conduct an FBA, and 54% conducted one. However, the mean preparedness rating for independently conducting an FBA was 1.91 for Associates-level students and 1.88 for Masters-level students (Figure 19), indicating preparedness ratings were approximately the same even though Masters-level students reported more training and implementation experiences. Both means fell in between the slightly to moderately prepared ratings.

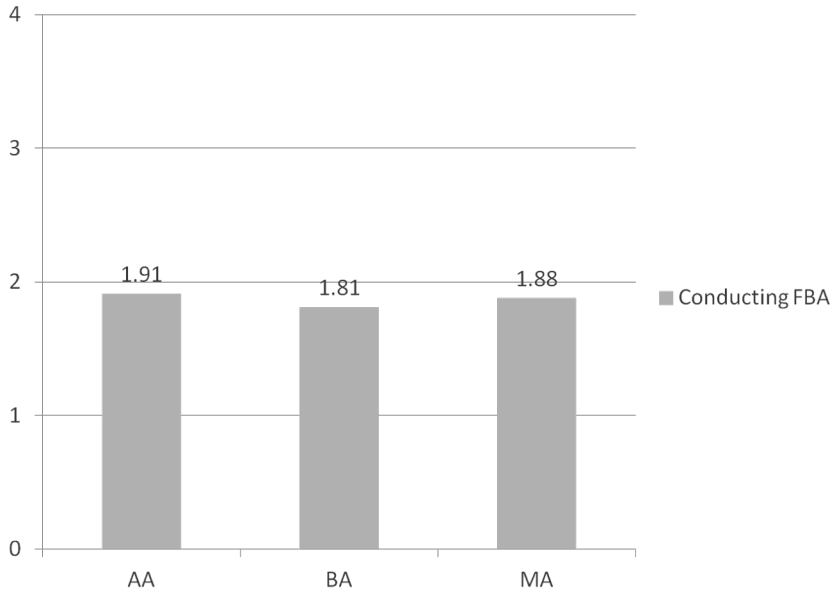

Figure 19. Mean preparedness ratings by degree level.

Equalization of preparedness ratings might have been due, in part, to the level of understanding preservice teachers had regarding the difficulty of each practice. Those who were not trained in, or had not implemented, the practice may not have understood its complexity. This may have led them to indicate they were slightly prepared to carry it out even when they had no training. On the other hand, those who had been trained in, and implemented, the practice should have better understood the complexities of the intervention. Their experiences may have led them to feel they needed more practice and feedback before being prepared to implement it independently. Therefore, they might also have rated themselves as only slightly prepared.

Preservice teachers' concerns and needs. Participants' answers regarding concerns and desired supports for addressing social emotional/behavioral assessment and intervention closely reflected research on both the challenges new teachers face, and

effective supports for retaining new teachers. Research indicates early childhood teachers struggle to plan and implement effective behavioral interventions, and lack adequate resources and support to address challenging behavior (Cassidy, Lower, Kintner-Duffy, Hegde, & Shim, 2011). Research also indicates that new teachers benefit from a supportive administration, strong teams, mentoring from experienced teachers, coaching, and building communities of practice (Hunt, Soto, Maier, & Doering, 2003). All of these concerns and support needs were represented in survey answers. Participants' responses also indicated their need for on-going training in social emotional/behavioral assessment and intervention once the begin teaching. Continued research is needed on the type of inservice training and resource support that is both effective and realistic for the early childhood field.

Finally, although the survey results provided information about the practices preservice teachers were taught within their training programs, they did not provide any information on the actual content and quality of program materials and training. For example, respondents' answers to the question on whether or not they had been taught to collect data on student behavior indicated that the majority received this training (87.5%) and implemented the practice (79.5%). However, no information was gathered on what "collecting data on student behavior" meant to different programs. It is likely that there were different interpretations of how (e.g., daily tally sheets, informal observations) and what type (e.g., data linked to goals, general descriptions of behavior) of data should be collected. Research indicates that the type of data collected, and the way it is collected impacts how well teachers assess causes of and changes in behavior (Hojnoski, Gischlar, & Missall, 2009).

Further research needs to be done on actual social emotional/behavioral assessment and intervention course content within different early childhood programs. Assessing course schedules and syllabi from various programs would provide additional information on the breadth of training within the field, as well as differences based on program type and level. Course content can then be assessed in relation to NAEYC and DEC professional standards related to social emotional assessment and intervention. Making sure course content is aligned with professional standards can help faculty in higher education be more consistent across programs. Further research on how course content is implemented by students in practicum and student teaching placements is also essential to understanding how preservice teachers can be better served by training programs.

Limitations

Although multiple and varied attempts were made to gain a large sample of participants for this survey, the final sample size was small. Recruiting participants that qualified for the study was difficult due to the need to access students through representatives of teacher training programs, rather than having direct access to the students themselves. Program administrators had to first agree to participate, and then send the survey out to students. Responses from the programs that declined to participate (8% of programs contacted) indicated they felt uncomfortable having their students participate. Ultimately, after multiple email requests, only 22% of programs invited to participate agreed to send the survey to students. Once the survey link was sent to programs, it was up to them to send the link to their students. Without access to student emails, there was no way for the researcher to send follow-up requests.

The final participant sample had unequal representation from both program types and degree levels. Almost half of the participants (46%) were from ECE programs, 32% were from ECSE programs, and only 22% were from Dual programs. Although these unequal numbers aren't ideal for comparison purposes, they do reflect the current state of early childhood teacher training programs. There are significantly more programs with an ECE focus as compared to an ECSE or Dual emphasis.

Differences in degree levels, however, were not reflective of current program numbers. Almost half (49%) of survey respondents were from Masters-level programs, 31% were from Associates-level programs, and 19% were from Bachelors-level programs. This number is particularly interesting when compared to the percentages of programs, by level, who agreed to send out their survey to students. The majority of programs who agreed to participate were Associate-level (56%). Masters-level programs made up the smallest group (18%). This difference may indicate that students enrolled in Masters-level programs, which often have more of an emphasis on research, are more inclined to participate in research studies themselves.

Another limitation linked to program type and degree level is the relationship between these two variables, especially for ECSE programs. Almost all of the respondents from ECSE programs were enrolled in a Masters-level program (90.3%). The rest of the ECSE sample (9.7%) was from Associates-level programs. Therefore, there was no representation of ECSE students within the Bachelors-level category. Few Bachelor-level ECSE programs exist, however. Within the Associates-level category the majority of respondents were from ECE programs (85.9%). Future studies of this type

should focus on targeting programs more specifically in order to get a larger representation of students in each degree level-program type category.

Although programs from all regions of the United States were contacted to participate in the survey, the sample had unequal representation of programs from different regions. In particular, there was heavy representation of the West, which made up 33% of the sample population. The Southeast (14%) and Southwest (11%) were the least represented. This unequal representation may be due to the timing of survey dissemination. Different regions operate on different school schedules. The goal of the research was to survey students who had just completed or were just about to complete their early childhood teacher training program. Due to various school schedules, when the survey was sent out some programs had just started their summer break, while others were still in session. Future surveys of this type should be sent out in conjunction with the school schedules of different regions in order to gain a wider representation of programs throughout the country.

Another limitation of the study is the examination of the survey itself as an assessment tool. Although concerted effort was made to create a survey that accurately reflected the construct of social emotional/behavioral assessment and intervention, no statistical analysis was performed to assess if the intended constructs were formed. Further research will include a confirmatory factor analysis of the survey to assess if factors for training, implementation, and preparedness were adequately constructed.

Study II: Behavior Support Plan Study

The SEAM Preschool Teaching Guide was developed to coincide with the preschool version of the SEAM. The purpose of the guide is to assist early childhood practitioners, particularly those new to the field, in identifying and implementing evidence-based social emotional/behavioral interventions directly linked to assessment results. A small pilot study was conducted to assess the feasibility of using the teaching guide to assist early childhood preservice teachers in the creation of high quality behavior support plans.

The following section discusses findings related to both the creation of the teaching guide and the pilot study. Future directions for research and limitations of the study are also presented.

Discussion and Future Directions

The creation and pilot testing of the SEAM Preschool Teaching Guide adds to research regarding effective practices for linking social emotional assessment results to evidence-based intervention strategies. In order to make sure resources are effective it is not only important to make sure they are linked to research, but that they can be realistically utilized within the field. Development of the teaching guide provided a model for creating resources based on both evidence based practices and the needs of early childhood educators. Due to the range of training within early childhood education, special attention was paid to creating a resource that could be used by practitioners from various backgrounds. Content was presented in easy to read language that was free of jargon, and effective strategies for adult learners were used (e.g., provision of multiple examples within context).

Results from the pilot study indicated that the teaching guide was effective in helping practitioners create behavior support plans linked to social emotional assessment results. Not only did quality scores increase after use of the teaching guide, but preservice teachers indicated they found the guide to be relevant and useful. Participant responses suggested that they would be highly likely to use a resource such as the teaching guide within the field.

The SEAM Preschool Teaching Guide directly addressed identified needs of preservice teachers. The support need most often identified by respondents on the preservice teacher survey was *resources on specific interventions and guidelines for practice*. Another of the top support needs was r*esources and training on social emotional/behavioral assessment*, with some respondents specifically indicating they wanted support linking assessment results to strategies and goals. Results from the pilot study suggested the SEAM Preschool Teaching Guide can help address both of these support needs.

Another finding from the pilot study was that a short training was sufficient to improve participants' ability to create behavior support plans linked to assessment results. This indicates the SEAM Preschool Teaching Guide has the potential to be a resource used independently by practitioners, or with coaches and consultants working with early childhood educators. Often consultants are scheduled to work with practitioners for a very limited amount of time (e.g., one hour a month). Therefore, it is important to create resources coaches or consultants can use to train practitioners within their allotted timeframe, and that practitioners can access and use in between consultant visits.

The pilot study served as the starting point for assessing the SEAM Preschool Teaching Guide. Information provided by study participants will be used to make improvements to the guide. Once the entire teaching guide is completed, more intensive testing will need to be done. In particular, future research will focus on how well practitioners are able to implement behavior support plans once they have created them. Creation of high-quality behavior support plans linked to assessment results is the first step in providing children with appropriate interventions. However, the implementation of these strategies is where the true intervention takes place.

Limitations

The first limitation of this study was the number of participants. Since it was a pilot study a small number were recruited. Although the original target number was 30, after months of recruitment and training only 25 preservice teachers chose to participate. The small number of participants led to the second study limitation: sample representation. Although the study consisted of participants from both ECE and ECSE programs, and had representatives of all degree levels (AA, BA, MA), the ECSE and Masters-level students had total overlap. This makes it more difficult to address the effect of program type and degree level on participant scores. Future studies of the SEAM Preschool Teaching Guide will focus on recruiting a more varied sample.

Conclusion

"The most important period of life is not the age of university studies, but the first one, the period from birth to the age of six" (Maria Montessori, no date). Research on social emotional competence, however, indicates that the two are inextricably intertwined. In order for children experiencing social emotional/behavioral needs to reach

their full potential, it is imperative that the adults who teach them have been adequately prepared by their universities and colleges. To do this, early childhood preservice programs need to continually assess the quality of training they are providing and make improvements based on student feedback and graduate outcomes.

It is also important for researchers and practitioners within early childhood education to find ways to support new teachers in meeting the social emotional/behavioral needs of their students. Providing early childhood teachers with adequate support helps ensure that young children receive appropriate and effective intervention. This, in turn, results in better life outcomes.

APPENDIX A

RECRUITMENT MATERIALS

Early Childhood Preservice Teacher Survey

E-mail Invitation to Program Representative:

Dear _____,

I am a doctoral student in the University of Oregon Early Intervention program and am currently conducting a survey of students in early childhood education and early intervention/early childhood special education teacher training programs. The survey is specifically geared toward students who have graduated within the past 3 months, or who are within 3 months of completing their teacher training program. The survey has been reviewed and approved by the Institutional Review Board (IRB) at the University of Oregon.

I am contacting you to ask your help in disseminating this survey to students in your program at _____. The purpose of the survey is to better understand the current knowledge, practices, and comfort levels of students in early childhood education teacher training programs regarding social-emotional and behavioral assessment and intervention. It is a 32-question national online survey that is completely anonymous and takes approximately 10-15 minutes to complete. ***Responses will not be linked to individual participants or universities***.

Students who participate will have the opportunity to enter into a drawing for a $50.00 Amazon.com gift card. Out of 300 survey participants there is a chance of 1 in 30 to win a gift card.

Please email me back at lois@uoregon.edu if you are willing to send the survey link out to your students and I will send an email with the link. If there is another person in your program who would be more appropriate for me to contact regarding this study please feel free to forward this e-mail to him/her.

I appreciate your consideration in helping with this important study and look forward to hearing from you.

Sincerely,

Lois Pribble
University of Oregon

Online Survey Introduction

Dear Prospective Participant,

This is an anonymous online survey being conducted by Lois Pribble, a doctoral student from the University of Oregon Early Intervention Program. The purpose of the survey is to better understand the current knowledge, practices, and comfort levels of early childhood preservice teachers regarding social-emotional and behavioral assessment and intervention. To participate, you must be 18 years or older and currently enrolled OR recently graduated from an early childhood education (ECE) or early intervention/early childhood special education (EI/ECSE) teacher training program. The survey is voluntary.

This survey takes approximately 10-15 minutes to complete. If you feel uncomfortable answering any questions on this survey you can stop completing it at any time.

The results will be reported for the group of respondents as a whole. ***Responses will not be linked to individual participants or universities***.

At the end of the survey respondents will have a chance to be entered into a **drawing for $50 Amazon.com gift cards**. Out of 300 participants the odds of winning are 1 in 30.

Thank you for your consideration.

Lois Pribble
lois@uoregon.edu

Jane Squires
Advisor
jsquires@uoregon.edu

If you choose to participate in this survey please click on the link below. When you have completed the survey click on the "submit" button. Please complete the survey within the next 7 days.

Are you a student or recent graduate of an Early Childhood Education teacher training program?

Earn $50.00 for participation in a 2-3 hour study on behavior support plans.

The next research session will take place
Saturday, November 3rd
10am -1pm
University of Oregon campus
Snacks, drinks & lunch provided
Call or email now to sign up for this session or schedule an alternate session!

EARLY CHILDHOOD EDUCATION RESEARCH STUDY

Research Participants needed

To test out a new teaching guide for social-emotional/behavioral interventions

Earn $50.00 for your participation

To volunteer for the study, or for further information, Contact Lois Pribble at lois@uoregon.edu or **541-505-8651**

APPENDIX B

CONSENT FORMS

University of Oregon Early Intervention Program

Informed Consent for Participation as a Subject in

Preschool Behavior Support Plan Study

Investigator: Lois Pribble

Adult Consent Form

Introduction

- You are being asked to be in a research study on the creation of preschool behavior support plans.

- You were selected as a possible participant because you are either:
    - currently enrolled in your final year of study in an early childhood education (ECE) or early intervention/early childhood special education (EI/ECSE) teacher training program, OR

    - have graduated from an ECE or EI/ECSE teacher training program within the last 3 months

- 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 explore the usefulness of using the Social Emotional Assessment Measure (SEAM) Preschool Teaching Guide to assist teachers in developing behavior support plans for preschool children.

- Participants in this study are from Oregon.

Description of the Study Procedures:

If you agree to be in this study, we would ask you to do the following things:

- Attend a 2 to 3 hour research session that includes the following tasks:

    - Short training session on the Social Emotional Assessment Measure (SEAM) (approximately 20-30 minutes)
        - Short training session on the SEAM Preschool Teaching Guide (approximately 20=30 minutes)/

- Completion of a behavior support plan for a preschool child using a SEAM protocol and short vignette of a child (approximately 45-60 minutes).

- Completion of a second behavior support plan for a preschool child using a SEAM protocol, a short vignette of a child, and the SEAM Preschool Teaching Guide (approximately 60-90 minutes)

- Completion of a short social validity questionnaire.

The entire research session will take approximately 3 to 4 hours, depending on how long it takes to complete each behavior support plan

Risks/Discomforts of Being in the Study:

- The study has the following risks:
    - There is a small possibility that participants may become uncomfortable when creating the behavior support plans.

Benefits of Being in the Study:

- The purpose of the study is to explore the usefulness of the SEAM Preschool Teaching Guide to assist early childhood teachers in developing behavior support plans for preschool children.

- The benefits of participation are:
    - A $50.00 payment upon completion of the study.
    - The opportunity to participate in research that may benefit early childhood practitioners and preschool children with social emotional issues. Information gained from this study will be used to help develop a teaching guide to support early childhood educators in linking social emotional assessment to strategies that support young children's social emotional development and address challenging behavior.

Payments:

- You will receive the following reimbursement:
    - $50.00 in cash immediately after completion of the research study (2 behaviorsupport plans).
    - A payment of $5 will be given to participants who do not complete both behavior support plans.

Costs:

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

Confidentiality:

- The records of this study will be kept private. 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.

- Coded data will not be linked to participants' names/identities. Access to the records will be limited to the researchers; however, please note the Institutional Review Board and internal University of Oregon auditors may review the research records.

- Your participation is voluntary. If you choose not to participate, it will not affect your current or future relations with the University of Oregon.

- 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. Withdrawal from the study does not jeopardize grades nor risk loss of present or future University relationships.

- Withdrawal from the study will result in no payment.

Contacts and Questions:

- The researcher conducting this study Lois Pribble. For questions or more information concerning this research you may contact her at 541-346-2598 or lois@uoregon.edu

- If you have any questions about your rights as a research subject, you may contact: Research Compliance Services, University of Oregon at (541) 346-2510 or ResearchCompliance@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.

Signatures/Dates

_____

Study Participant (Print Name)

_____

Participant Signature
Date:

APPENDIX C

MEASURES

Early Childhood Preservice Teacher Survey

1. Are you currently enrolled in, or have you recently graduated from, an early childhood education or early intervention/early childhood special education teacher preparation program? (Yes/No)

    - If no — "Thank you for your willingness to participate in this survey. You do not currently meet the criteria for participation"

    - If yes, continue to next question

2. Does your program include training on teaching children between the ages of 3 to 6?

    - If no — "Thank you for your willingness to participate in this survey. You do not currently meet the criteria for participation"

    - If yes, continue to next question

3. Will you complete your teacher training program within the next six months? (Yes/No)

    - If no — "Thank you for your willingness to participate in this survey. You do not currently meet the criteria for participation"

    - If yes, continue to next question

4. What type of teacher education program are you currently enrolled in?

    □ Early Childhood Education

    □ Early Childhood Special Education

    □ Dual Program (early childhood education/early childhood special education)

5. What type of degree will you receive once you have completed the program?

    □ Associates

    □ Bachelors

    □ Masters

6. What state is your teacher education program in?

    _____

7. How many years have you worked in early childhood education or early intervention/early childhood special

education (outside of experiences in your current teacher training program)?

□ 0

□ 1-2

□ 3-5

□ 6-9

□ 10 or more

8. Have you received any additional training in social-emotional/behavioral interventions outside of your current

teacher training program (e.g. workshops, webinars, coaching, BCBA training)?

□ Yes

Please specify the type of training you have received _____

□ No

9. Has your teacher education program trained you to administer a social-emotional assessment for preschool children? (yes/no)

- If yes:
  - What social-emotional assessment(s) have you been trained to use? _____
  - Have you administered this assessment with a child during your teacher education program?

10. How well-prepared do you feel to independently **choose** an appropriate social emotional assessment to use with a preschool child?

- Extremely prepared
- Moderately prepared
- Slightly prepared
- Not at all prepared

11. How well-prepared do you feel to independently **administer** a social emotional assessment with a preschool child?

- Extremely prepared
- Moderately prepared
- Slightly prepared
- Not at all prepared

12. Has your teacher education program trained you to conduct a functional behavior assessment (FBA) with a preschool child? (yes/no)

- If yes:
  - Have you conducted a functional behavior assessment on a child during your teacher education program?

13. How well-prepared do you feel to conduct a functional behavior assessment with a preschool child?

- Extremely prepared
- Moderately prepared
- Slightly prepared
- Not at all prepared

14. Have you learned about the Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children (identified by the Center on Social Emotional Foundations for Early Learning (CSEFEL)) during your teacher education program?

If yes:

- How prepared do you feel to identify and describe the different tiers of the Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children and identify interventions that could be used within each tier?
  - Extremely prepared
  - Moderately prepared
  - Slightly prepared
  - Not at all prepared

15. Which of the following practices have you **learned about** during your teacher education program (please mark all that apply):

- Designing the physical environment to prevent challenging behavior
- Creating consistent schedules and routines to prevent challenging behavior
- Establishing and enforcing clear rules, limits, and consequences to prevent challenging behavior
- Using positive feedback (e.g., descriptive praise) and encouragement to support positive behavior
- Directly teaching social-emotional skills (e.g., using curriculum or social stories to help children identify emotions or solve a conflict)
- Using choice to prevent challenging behavior
- Using prompting and reinforcement to address challenging behavior
- Modeling appropriate behavior and labeling of emotions
- Using visual aids (e.g., visual schedule, first/then boards, solution cards) to support positive behavior

- Teaching children calming techniques (e.g., “Turtle Technique”) to help them self-regulate
- Helping children identify and choose solutions (e.g., get a teacher, ignore, say “Please stop”) to problems they face

16. Which of the following practices have you **carried out** during your teacher education program (please mark all that apply):

- Designing the physical environment to prevent challenging behavior
- Creating consistent schedules and routines to prevent challenging behavior
- Establishing and enforcing clear rules, limits, and consequences to prevent challenging behavior
- Using positive feedback (e.g., descriptive praise) and encouragement to support positive behavior
- Directly teaching social-emotional skills (e.g., using curriculum or social stories to help children identify emotions or solve a conflict)
- Using choice to prevent challenging behavior
- Using prompting and reinforcement to address challenging behavior
- Modeling appropriate behavior and labeling of emotions
- Using visual aids (e.g., visual schedule, first/then boards, solution cards) to support positive behavior
- Teaching children calming techniques (e.g., “Turtle Technique”) to help them self-regulate
- Helping children identify and choose solutions (e.g., get a teacher, ignore, say “Please stop”) to problems they face

17. Please indicate how well-prepared do you feel to carry out the following practices:

	Extremely prepared	Moderately prepared	Slightly prepared	Not at all prepared
Design the physical environment to prevent challenging behavior				
Create consistent schedules and routines to prevent challenging behavior				
Establish and enforce clear rules, limits, and consequences to prevent challenging behavior				
Use descriptive praise and encouragement to support positive behavior				
Directly teach social-emotional skills				

(e.g., using curriculum or social stories to help children identify emotions or solve a conflict)				
Use choice to prevent challenging behavior				
Use prompting and reinforcement to address challenging behavior				
Model appropriate behavior and labeling of emotions				
Use visual aids (e.g., visual schedule, first/then boards, solution cards) to support positive behavior				
Teach children calming techniques (e.g., "Turtle Technique") to help them self-regulate				
Help children identify and choose solutions (e.g., get a teacher, ignore, say "Please stop") to problems they face				

18. Have you been taught how to collect data on student behavior during your teacher education program? (yes/no)

If yes:

- Have you collected data on student behavior during practicum or student teaching within your teacher education program?

19. Have you **learned about** behavior support plans during your teacher education program? (yes/no)

If no: Survey will skip to question 21

20. Have you **created** a behavior support plan during your teacher education program?

If yes: For what purpose did you create the behavior intervention plan?

- Class assignment
- For use at a practicum or student teaching site
- Both

- Other (please explain)

21. Have you **implemented** a behavior support plan during your teacher education program?

22. How well-prepared do you feel to independently create and implement a behavior support plan for an individual child?

- Extremely prepared
- Moderately prepared
- Slightly prepared
- Not at all prepared

22. Please indicate how well-prepared do you feel to work with the preschool children described below:

	Extremely prepared	Moderately prepared	Slightly prepared	Not at all prepared
A child who has a difficult time expressing her feelings and cries or withdraws (disengages, hides, stops talking) when she is frustrated, or for no apparent reason.				
A child who consistently tantrums during transitions from one classroom activity to another.				
A child who has a difficult time staying on task during directed activities (e.g., circletime) and often interrupts or leaves the activity.				
A child who is ***verbally aggressive*** (e.g., yells, prolonged tantrums) toward peers and adults when he doesn't want to share or participate in an activity.				
A child who is ***physically aggressive*** (e.g., hits, pushes, kicks) toward peers and adults when he doesn't want to share or participate in an activity.				
A child with an identified behavior disorder who has been expelled from a previous preschool program due to aggressive behavior and noncompliance.				

Open-ended Questions:

23. What is your biggest concern regarding addressing the social emotional needs and

behavioral challenges of young children once you begin working within the early childhood education field?

24. What type of support around social-emotional/behavioral skills assessment and intervention would you like to receive once you begin working within the field of early childhood education?

Ending:

Thank you for your participation in this survey. Please enter your e-mail below in order to be entered into a drawing for a $50 gift card to Amazon.com. Your e-mail address will not be linked to your answers.

Social Validity Questionnaire
Preschool Behavior Support Plan Study

Please read each question below and answer it by checking your rating in one of the columns next to it.

	Extremely	Moderately	Slightly	Not at all
How ***easy*** was the Social Emotional Assessment Measure (SEAM) Preschool Teaching Guide to understand?				
How ***easy*** was it to link assessment results from the SEAM protocol to interventions in the SEAM Preschool Teaching Guide?				
How ***easy*** was the Behavior Support Plan form to use?				
How ***useful*** was the Behavior Support Plan form in helping you create a behavior support plan?				
How ***useful*** was the SEAM Preschool Teaching Guide in helping you identify appropriate interventions for the child described in the vignette?				
How ***likely*** would you be to use the ***Social Emotional Assessment instrument (the actual assessment)*** when working in a preschool classroom as either a teacher or a consultant?				
How ***likely*** would you be to use a resource like the ***SEAM Preschool Teaching Guide*** when working in a preschool classroom as either a teacher or a consultant?				

Are there any improvements could be made to the SEAM Preschool Teaching Guide to make it easier to use?

Do you have any other comments?

BEHAVIOR SUPPORT PLAN SCORING SHEET

Participant ID# _____ Behavior Support Plan **1** (without guide) or **2** (with guide) ___

Target behavior identified (SEAM item): Y/N

Context & description of behavior provided (When does it occur, what does it look like): Y/N

Identified Intervention	Evidence-based strategy	Linked to SEAM Results	Pyramid Tier (Level 1 or 2)	Context of intervention provided (Level 2)	Strategies for both correct & incorrect responses (Level 2)	Plan for data collection (Level 2)
1.						
2.						
3.						
4.						
5.						

APPENDIX D

TRAINING MATERIALS

Social Emotional Assessment/Evaluation Measure SEAM

Preschool Interval

(for developmental range 36-63 months)

Child's name: _____

Child's date of birth: _____

Today's date: _____

Family's name: _____

Name of person completing form: _____

Date of administration: _____

INSTRUCTIONS:

When completing the Social Emotional Assessment/Evaluation Measure: Preschool Interval (SEAM: Preschool) it is important to read each item carefully and think about your child's behavior before selecting an answer. In some cases, it may be necessary to observe your child before selecting a response to the item. Each item is accompanied by several examples to give you ideas about how the behavior *might* look. Please keep in mind that these behaviors may be displayed in different ways depending on your child's age, the developmental stage of your child and the expectations of your culture and family. The way in which your child displays these behaviors may or may not be illustrated by the examples. It is not expected that all children in the preschool interval will exhibit every behavior.

The four scoring options include: *Very True*, *Somewhat True*, *Rarely True* and *Not True*. For example, when indicating whether your child shares and takes turns with other children, check the box under:

- ***Very True*** if your child shares and takes turns with other children consistently or most of the time.
- ***Somewhat True*** if your child shares and takes turns with other children sometimes, though not consistently.
- ***Rarely True*** if your child shares and takes turns with other children rarely or only once in a while.
- ***Not True*** if your child does not share and take turns with other children.

In addition, each item has a circle that you can check to indicate if an item is a concern. Each item also has a triangle that you can check if you would like this item to become an intervention goal for your child.

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

	Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTER-VENTION GOAL
C-1.0 PRESCHOOL-AGE CHILD DEMONSTRATES HEALTHY INTERACTIONS WITH OTHERS.						
1.1 Child shows affection toward you and other familiar adults and children.	V	S	R	N	○	△
Some examples might be:						
• *Smiles at other children*						
• *Calls friends by name*						
• *Hugs you and favorite friends*						
• *Makes plans to sit by you or favorite friends at lunch*						
1.2 Child talks and plays with you and other familiar adults and children.	V	S	R	N	○	△
Some examples might be:						
• *Uses phrases or sentences to talk to others*						
• *Plays ball or other games with you*						
• *Names a friend with whom she likes to play*						
• *Plays favorite games with other children or adults*						
• *Engages in back-and-forth conversations with you and other familiar adults*						
1.3 Child uses words to let you know if she needs help, attention, or comfort.	V	S	R	N	○	△
Some examples might be:						
• *Asks for help to find a lost toy*						
• *Finds you when hurt and asks for a band-aid or hug*						
• *Talks about recent experiences, such as, "At Granny's, I fell off my bike and hurt my foot"*						
• *Can resolve some conflicts with words: "It's my turn with the fire hat"*						
1.4 Child shares and takes turns with other children.	V	S	R	N	○	△
Some examples might be:						
• *Takes turns on swing with reminders from you*						
• *Shares toys, such as rolling pins and shape cutters, when playing with playdough*						
• *Takes turns in simple games, such as tag*						
• *Offers paints or crayons to a friend when drawing*						
• *Takes turns when playing board games, such as Chutes & Ladders, and playing other games, such as Red Rover*						
1.5 Child plays with other children.	V	S	R	N	○	△
Some examples might be:						
• *Plays in sandbox near other children*						
• *Plays imaginatively with peers for short times*						
• *Plays dress up with other children, sharing clothing*						
• *Plays pretend games such as kitties, house*						
• *Plays imaginary games with peers that don't depend on objects, such as superheroes*						

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

		Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTER-VENTION GOAL
C-2.0	PRESCHOOL-AGE CHILD EXPRESSES A RANGE OF EMOTIONS.						
2.1	Child smiles and laughs. *Some examples might be:* • *Laughs when another child makes a funny face* • *Smiles when you come to pick her up from child care* • *Smiles and laughs when playing with peers* • *Laughs at fun books during group time*	V	S	R	N	○	△
2.2	Child expresses a range of emotions using a variety of strategies. *Some examples might be:* • *Laughs cries, shouts in excitement, shows anger physically such as crossing arms, stomping feet* • *Expresses many feelings such as happy, sad, mad, tired* • *Says, "I'm mad at you," or "I'm scared"*	V	S	R	N	○	△
2.3	Child describes emotions of others. *Some examples might be:* • *Says, "He is sad" when another child cries* • *Identifies others' emotions; says, "you're tired" when teacher yawns* • *Describes others' emotions and reason for the emotion, "Teacher, you are sad because the kids are noisy and not listening"*	V	S	R	N	○	△
2.4	Child identifies own emotions. *Some examples might be:* • *Says she is mad or upset when angry* • *Tells you she is happy when given a toy she wants* • *Identifies feelings and why she has them: "I am mad because I never get to be teacher's helper"* • *Identifies some subtle feelings, such as frustration, disappointment, surprise*	V	S	R	N	○	△
C-3.0	PRESCHOOL-AGE CHILD REGULATES SOCIAL EMOTIONAL RESPONSES.						
3.1	Child responds to peer's or caregiver's soothing when upset. *Some examples might be:* • *Quiets when physically comforted by you or a peer* • *Quiets in response to your comforting: "Sebastian- you will have a turn next"* • *Stops fretting when you explain why he needs to come inside*	V	S	R	N	○	△

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

		Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTERVENTION GOAL
3.2	Child can calm self when upset within 5 minutes.	V	S	R	N	○	△
	Some examples might be:						
	• *Stops fussing after a minor fall within a few minutes*						
	• *Finds another activity after conflict with peer*						
3.3	Child can calm self after periods of exciting activity.	V	S	R	N	○	△
	Some examples might be:						
	• *Calms down after a game of chase within 10 minutes, with some guidance from you*						
	• *Stops laughing after funny event is over*						
	• *Transitions from outside to inside activities*						
3.4	Child remains calm in disappointing situations.	V	S	R	N	○	△
	Some examples might be:						
	• *Finds another game or toy when you remove a favorite toy, with some guidance from you*						
	• *Says it's okay when she did not win a prize*						
C-4.0	PRESCHOOL-AGE CHILD SHOWS EMPATHY FOR OTHERS.						
4.1	Child responds appropriately to others' emotional responses.	V	S	R	N	○	△
	Some examples might be:						
	• *Laughs when group of children are enjoying a game*						
	• *Gives a toy back when another child shows distress*						
	• *Asks why a friend or caregiver is feeling sad or angry*						
	• *Shows understanding that people have mixed emotions; may comment about peer, "She is sad and mad"*						
4.2	Child tries to comfort others when they are upset.	V	S	R	N	○	△
	Some examples might be:						
	• *Comforts another child who is crying, by offering a toy or reassuring words: "Are you okay?"*						
	• *Asks why adult is sad and listens to response*						
	• *Expresses understanding of others' feelings: "It is sad that she doesn't have a bike."*						
C-5.0	PRESCHOOL-AGE CHILD SHARES AND ENGAGES WITH OTHERS.						
5.1	Child focuses on or joins activities.	V	S	R	N	○	△
	Some examples might be:						
	• *Looks at a picture pointed out by another child*						
	• *Helps you with household tasks, helps to feed the dog, wipe the table*						
	• *Joins peers who are engaged in an activity, such as feeding baby dolls or making roads in a sand box*						

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

		Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTER-VENTION GOAL
5.2	Child greets adults and peers.	V	S	R	N	○	△
	Some examples might be:						
	• *Says "Hi" to friend; says "Bye" when leaving preschool*						
	• *Uses friends' and teachers' names*						
5.3	Child cooperates in play or when completing a task.	V	S	R	N	○	△
	Some examples might be:						
	• *Helps another child stack blocks to build a tall tower*						
	• *Engages in dramatic play: "You be the dad and I will be the baby"*						
	• *Can switch roles when playing: "Now I am the bus driver and you are the kid"*						
5.4	Child participates appropriately in group activities.	V	S	R	N	○	△
	Some examples might be:						
	• *Participates in group singing*						
	• *Helps with cooking project, taking turns pouring ingredients and stirring with your guidance*						
	• *Sits quietly in a small group while a story is being read*						
C-6.0	PRESCHOOL-AGE CHILD DEMONSTRATES INDEPENDENCE.						
6.1	Child explores new materials and settings.	V	S	R	N	○	△
	Some examples might be:						
	• *Is becoming more independent and leaves your side for a short time at the park*						
	• *Becomes independent and plays by self at the playground*						
	• *Tries out equipment at new playground*						
	• *Explores new activity in the classroom, such as sensory table with shaving cream or dry beans*						
6.2	Child tries new task before seeking help.	V	S	R	N	○	△
	Some examples might be:						
	• *Tries to complete puzzle before seeking help*						
	• *Tries to open jar before asking for assistance*						
	• *Tries spreading peanut butter on toast or muffin independently*						
6.3	Child stays with or returns to challenging activities.	V	S	R	N	○	△
	Some examples might be:						
	• *Asks to skate again after falling*						
	• *Helps clean up until all objects are put away*						
	• *Builds a block tower again after it falls over*						
	• *Clean up toys by self until all objects are put away*						

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

		Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTER-VENTION GOAL
6.4	Child can leave you without distress.	V	S	R	N	○	△
	Some examples might be:						
	• *Leaves you on park bench to play with friends in the playground*						
	• *Tells you "Bye" and does not cry when left at familiar child care*						
C-7.0	PRESCHOOL-AGE CHILD DISPLAYS A POSITIVE SELF-IMAGE.						
7.1	Child knows personal information.	V	S	R	N	○	△
	Some examples might be:						
	• *Gives first name, age, and gender when asked*						
	• *Tells you first and last name and siblings' first names*						
	• *Knows identifying information: phone number, address, birthday*						
7.2	Child shows off work, takes pride in accomplishments.	V	S	R	N	○	△
	Some examples might be:						
	• *Shows you a completed drawing*						
	• *Says "Look at me" when painting*						
	• *Tells other adults, "Watch me run fast"*						
	• *Describes what she has done: "Mom, I cut this out, taped it, and put glitter on it. Isn't it beautiful?"*						
7.3	Child makes positive statements about self.	V	S	R	N	○	△
	Some examples might be:						
	• *Tells you: "I can do it myself"*						
	• *Describes performance: "I made a huge dinosaur"*						
	• *Describes work: "My tower is taller than Fernando's"*						
	• *Describes traits: "I'm good at cutting"*						
	• *Says, "I'm smart"*						
C-8.0	PRESCHOOL-AGE CHILD REGULATES ATTENTION AND ACTIVITY LEVEL.						
8.1	Child stays with motor activity for 10 minutes or longer.	V	S	R	N	○	△
	Some examples might be:						
	• *Rides tricycle for 10 minutes*						
	• *Plays games like Simon Says for 10 minutes*						

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

	Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTER-VENTION GOAL
8.2 Child participates in early literacy activities.	V	S	R	N	○	△
Some examples might be:						
• *Holds book correctly and turns pages*						
• *Recognizes a few letters of the alphabet*						
• *Copies and prints some letters and shapes*						
• *Recognizes many letters of the alphabet, printed name and some words*						
• *Writes first name and many letters*						
8.3 Child moves from one activity to another without problems.	V	S	R	N	○	△
Some examples might be:						
• *Shifts from group time to free play activities, with adult prompt and without problems*						
• *Moves from bath to bed with adult prompt*						
8.4 Child participates in games with others.	V	S	R	N	○	△
Some examples might be:						
• *Plays cars with other children*						
• *Plays card games such as Go Fish with others*						
• *Plays board games with playmates*						
8.5 Child regulates his activity level to match setting.	V	S	R	N	○	△
Some examples might be:						
• *Plays with peers in sandbox with safety reminders*						
• *Sits safely in the bath while bathing, with your supervision*						
• *Jumps and runs outside*						
• *Participates in small and large group with help from you or other adult; sits and listens to story with group; dances with friends to music*						
• *Entertains self, such as taking book to reading corner to look at pictures*						
• *Plays safely outside with peers or at parks, with your supervision*						
C-9.0 PRESCHOOL-AGE CHILD COOPERATES WITH DAILY ROUTINES AND REQUESTS.						
9.1 Child follows routines and rules.	V	S	R	N	○	△
Some examples might be:						
• *Follows clean-up routine after meals with reminders*						
• *Helps get self dressed*						
• *Follows simple rules at home and school*						
• *Enjoys games with rules, such as Chutes and Ladders, Candyland*						
• *Transfers rules from different settings: "My teacher says we walk outside"*						

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

		Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTER-VENTION GOAL
9.2	Child does what he is asked to do.	V	S	R	N	○	△
	Some examples might be:						
	• *Stops running when asked*						
	• *Gets coat on when asked*						
	• *Remembers a rule when reminded, such as using a quiet voice, walking indoors*						
9.3	Child responds appropriately when corrected by adults.	V	S	R	N	○	△
	Some examples might be:						
	• *Takes appropriate toy when prompted by adult*						
	• *Returns too-large portion of food to serving plate when told*						
C-10.0	PRESCHOOL-AGE CHILD SHOWS A RANGE OF ADAPTIVE SKILLS.						
10.1	Child feeds self and eats a variety of foods without a problem.	V	S	R	N	○	△
	Some examples might be:						
	• *Eats most foods that are offered*						
	• *Eats small bites of new foods*						
	• *Eats with utensils and can pour juice from a pitcher or jug*						
	• *Prepares food (e.g. opens bag of fruit snacks, uses knife to spread peanut butter on crackers)*						
10.2	Child dresses self.	V	S	R	N	○	△
	Some examples might be:						
	• *Undresses independently (no buttons or snaps)*						
	• *Dresses independently*						
	• *Uses buttons and unzips*						
	• *Manipulates buttons, zippers, and shoes*						
10.3.	Child goes to bed and falls asleep without a problem.	V	S	R	N	○	△
	Some examples might be:						
	• *Goes to bed when prompted by you, without crying*						
	• *Follows naptime or sleeping routine at home, child care, or preschool*						
	• *Falls asleep shortly after going to bed*						
10.4.	Child uses the toilet appropriately.	V	S	R	N	○	△
	Some examples might be:						
	• *Indicates need and seeks bathroom when necessary*						
	• *Uses toilet with little help from caregiver and remains dry at night*						
	• *Takes care of toileting needs independently*						

CHILD BENCHMARKS AND ASSESMENT ITEMS: PRESCHOOL INTERVAL

Please read each question carefully and

1. Check the box ☐ that best describes your child's behavior,
2. Check the circle ○ if this item is a concern, and
3. Check the triangle △ if this will be an intervention goal.

		Very True	Somewhat True	Rarely True	Not True	CHECK IF THIS IS A CONCERN	INTER-VENTION GOAL
10.5	Child manages changes in settings and conditions.	V	S	R	N	○	△
	Some examples might be: • *Accepts changes in familiar routine, such as field trip at school, father picking her up instead of mother* • *Adjusts to sleeping in a new place* • *Eats without problem in a restaurant*						
10.6	Child keeps himself safe in potentially dangerous conditions.	V	S	R	N	○	△
	Some examples might be: • *Waits for you or other adult before crossing a street* • *Climbs a jungle gym safely* • *Follows rules when in public, such as stopping at crosswalks, not going away with strangers*						
10.7	Child solves problems to meet her needs.	V	S	R	N	○	△
	Some examples might be: • *Asks you for help when hungry or thirsty* • *Finds you when needing help with problems, such as opening outside door* • *Gets cup of water when thirsty* • *Problem-solves with peer to decide rules of a game or roles in imaginary play (e.g. playing house or grocery store)*						

Vignette: Mary

Mary is a four year old child who attends St. Mark's Preschool. She started attending the preschool at the beginning of the year and has been having a difficult time engaging in peer interactions. Mary tends to play and do activities by herself. Even if she is in the same area as the other children she doesn't join them in the activity. When it is choice time Mary usually chooses to do art, where she draws detailed pictures of different types of animals. She also enjoys playing with the stuffed animals in the quiet corner. However, when peers come over to the area she is in Mary turns away from them or leaves the area. During circletime she is very quiet and rarely joins in unless called on by the teacher.

Both Mary's teacher and her parents are concerned about her lack of social interaction with other children. They want to find ways to help Mary initiate and maintain peer play and conversation.

Vignette: Ramon

Ramon is a 4 year old boy who attends La Puerta del los Niños preschool. He has been attending the preschool for a little over a year. Ramon's teachers have noticed that he continues to have a difficult time participating appropriately in activities. He often wanders from activities and will resist transitioning from a favored activity (e.g., outside time) to the next. While most of the children in the class follow the classroom routine independently, the teachers usually need to find where Ramon has gone and bring him back to the group.

During structured group activities Ramon has a difficult time sitting on his bottom and will often talk to or touch peers instead of paying attention to the activity. When Ramon is interested in something else he will leave structured group activities and go over to the area that interests him. This usually occurs during circletime. Yesterday while the teacher was reading a story at circle Ramon got up and ran over to play at the train table. When the assistant went to bring him back to circle Ramon started to cry and scream for the trains.

Ramon's teacher wants to help support him in learning how to follow the classroom routines.

Support Plan

Date: _____

Child's name: _____

Identified area of need (SEAM Benchmark/Item):

Benchmark: _____

Item: _____

Specific examples of identified behavior:

Context (Where & when does the behavior occur?):

_____

_____

_____

_____

Description (What does the behavior look like?, What does the child do?):

_____

_____

_____

_____

_____

Universal Support Strategies:

1. _____

_____

_____

2. _____

_____

_____

3. _____

_____

_____

Targeted Support:

1. _____

   _____

   _____

   Strategy will be used during the following routines/activities:

   _____

   Feedback/consequences for the child:

   - Successful response:_____

     _____

   - Unsuccessful response: _____

     _____

2. _____

   _____

   _____

   Strategy will be used during the following routines/activities:

   _____

   Feedback/consequences for the child:

   - Successful response:_____

     _____

   - Unsuccessful response: _____

     _____

3. _____

   _____

   _____

   Strategy will be used during the following routines/activities:

   _____

   Feedback/consequences for the child:

   - Successful response:_____

     _____

   - Unsuccessful response: _____

     _____

Process for monitoring and documenting child progress:

Who:_____

_____

When:_____

_____

How: _____

_____

Review Date: _____

APPENDIX E

SUPPLEMENTAL MATERIALS

Construct Map: Early Childhood Social Emotional Assessment & Intervention

Respondents who are ***proficient*** in SE/Behavioral Assessment & Intervention: **1. Training** • Choose an appropriate social-emotional/behavioral assessment. • Identify and understand evidence-based social-emotional skill/behavioral practices (e.g., FBA, BSP, various strategies). • Understand the Pyramid Model for Promoting Social and Emotional Competence in Infants and Young Children • Identify and understand appropriate practices for different tiers of intervention. **2. Preparedness** • Feel extremely prepared to administer a social-emotional/behavioral assessment • Feel extremely prepared to conduct a functional behavior assessment (FBA) • Feel extremely prepared to carry out interventions at all levels of the Teaching Pyramid • Link assessment results to appropriate evidence based practices. • Create intervention plans that address tiered levels of intervention. **3. Intervention** • Correctly administer a social-emotional/behavioral assessment. • Correctly conduct functional behavioral assessments (FBA) • Facilitate **nurturing and responsive caregiving relationships** (e.g. build positive relationships with children, responsive to children's conversations and needs, provide positive feedback and encouragement) • Maintain a **high-quality, supportive classroom environment** o *Physical environment* (e.g., well-organized, clearly defined play areas, arranging materials to promote engagement) o *Structural environment* (e.g., predictable & balanced schedule, structured transitions, developmentally appropriate and engaging activities, clear rules and directions) • Use **curriculum modifications and adaptations** to support social-emotional skills/behavior of students (e.g., visual supports, assigned seating, mats to help children define their space) • Use **targeted social emotional supports & teaching strategies** for children who need more specific guidance in social emotional skill development (e.g., prompting & reinforcement, choice, modeling, solution kits, direct instruction on identifying & expressing emotions, etc.) • Use **intensive interventions** with children with persistant challenging behavior (e.g., positive behavior support) • Successfully conduct social-emotional/behavioral interventions at all tiers of the Pyramid Model. • Collect data on student progress with social-emotional interventions. • Analyze data to monitor student progress and assess effectiveness of intervention. • Use data collected regarding student behavior to modify intervention plans	Item response indicates ***proficiency*** in Social-Emotional/ Behavioral Intervention in Early Childhood Education

REFERENCES CITED

Alvarez, H.K. (2007). The impact of teacher preparation on responses to child aggression in the classroom. *Teaching and Teacher Education, 23*, 115-129.

Anhorn, R. (2008). The profession that eats its young. *The Delta Kappa Gamma Bulletin*

Arnold, D. H., McWilliams, L., & Arnold, E. H. (1998). Teacher discipline and child misbehavior in day care: Untangling causality with correlation data. *Developmental Psychology*, *34*, 276–287.

Bagdi & Vacca (2005). Supporting early childhood social-emotional well being: The building blocks for early learning and school success. *Early Childhood Education Journal, 33*, 145-149.

Bayat, M., Mindes, G., & Covitt, S. (2010). What does rti (response to intervention) look like in preschool?. *Early Childhood Education Journal*, *37*493-500.

Benedict, E., Horner, R., & Squires, J. (2007). Assessment and implementation of positive behavior support in preschools. *Topics in Early Childhood Special Education*, *27*, 174- 192.

Blair, K., Fox, L., & Lentini, R. (2010). Use of positive behavior support to address the challenging behavior of young children within a community early childhood program. *Topics in Early Childhood Special Education*, *30*, 68-79.

Bodrova, E., & Leong, D. J. (2006). Self-regulation as key to school readiness: How early childhood teachers promote this critical competency. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development* (pp. 203–224). Baltimore: Brookes Publishing.

Bornstein, M., Hahn, C., & Haynes, O.M. (2010). Social competence, externalizing, and internalizing behavioral adjustment from early childhood through early adolescence: Developmental cascades. *Development and Psychopathology, 22*, 717-735.

Branson, D. & Demchak , M. (2010). Toddler teachers' use of teaching pyramid practices. *Topics in Early Childhood Special Education, 30*, 196-208.

Briggs-Gowan & Carter (2008). Social-emotional screening status in early childhood predicts elementary school outcomes. *Pediatrics, 121*, 957-962.

Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education, Vol. 3, 2nd Ed.* Oxford: Elsevier.

Brown & Conroy (2011). Social-emotional competence in young children with developmental delays: Our reflection and vision for the future. *Journal of Early Intervention, 33*, 310-320.

Bruder, M. B., Mogro-Wilson, C., Stayton, V. D., & Dietrich, S. L. (2009). The national status of in-service professional development systems for early intervention and early childhood special education practitioners. *Infants & Young Children, 22*, 13-20. *Infants & Young Children, 22*, 13-20.

Buysse, V. & Hollingsworth, H. L. (2009). Program quality in early childhood inclusion: Recommendations for professional development. *Topics in Early Childhood Special Education, 29,* 119-128.

Buysse, V. , Wesley, P. (2006). Evidence-based practice in the early childhood field. Washington, D.C.: Zero to Three.

Buysse, V. , Wesley, P. , Snyder, P. , & Winton, P. (2006). Evidence-based practice: What does it really mean for the early childhood field?. *Young Exceptional Children*, *9*, 2-11.

Carter, Deborah R. and Van Norman, Renee K. (2010). Class-wide positive behavior support in preschool: Improving teaching implementation through consultation". *Early Childhood Education Journal, 38*, 279-288.

Caselman, T. , & Self, P. (2008). Assessment instruments for measuring young children's social-emotional behavioral development. *Children & Schools*, *30*, 103-115.

Cassidy, D. J., Lower, J. K., Kintner-Duffy, V. L., Hegde, A. V., & Shim, J. (2011). The day-to-day reality of teacher turnover in preschool classrooms: An analysis of classroom context and teacher, director, and parent perspectives. Journal of Research in Childhood Education, 25(1), 1-23.

Catlett, C. (2010). Resources within reason. *Young Exceptional Children, 13*, 42.

Center for Evidence-Based Practice. (2004). *Facts about young children with challenging behaviors*. Retrieved from http://challengingbehavior.fmhi.usf.edu/handouts/facts about.pdf.

Chien, N., Howes, C., Burchinal, M., Pianta, R., Ritchie, S., Bryant,D., …Barbarin, O., (2010). Children's classroom engagement and school readiness gains in prekindergarten. *Child Development*, *81*, 1534-1549.

ChildStats.gov (2011). America's children: Key indicators of well-being, 2011. Retrieved from http://www.childstats.gov/americaschildren/famsoc3.asp.

Coolahan, K.C., Fantuzzo, J., Mendez, J., & McDermott, P. (2000). Preschool peer interactions and readiness to learn: Relationships between classroom peer play and learning behaviors and conduct. *Journal of Educational Psychology, 92*, 458-465.

Denham, S., Blair, K., DeMulder, A., Levitas, J., Sawyer, K., Auerbach-Major, & Queenan, P. (2003). Preschool emotional competence: Pathway to social competence? *Child Development, 74*, 238-256.

Ducharme, J. , Harris, K. , & Milligan, K. (2003). Sequential evaluation of reinforced compliance and graduated request delivery for the treatment of noncompliance in children with developmental disabilities. *Journal of Autism and Developmental Disorders*, *33*(5), 519-534.

Duda, M.A., Dunlap, G., Fox, L., Lentini, R., & Clarker, S. (2004). An experimental evaluation of positive behavior support in a community preschool program. *Topics in Early Childhood Special Education, 24*, 143-155.

Dunlap, G., Strain, P., Fox, L., Carta, J., Conroy, M., Smith, B., Kern, L., Hemmeter, M.L., Timm, M., McCart, A., Sailor, W., Markey, U., Markey, D.J., Lardieri, S., & Sowell, C. (2006). Prevention and intervention with young children's challenging behavior: A summary of content knowledge. *Behavioral Disorders, 32*, 29-45.

Dunst, C., & Trivette, C. (2009). Using research evidence to inform and evaluate early childhood intervention practices. *Topics in Early Childhood Special Education*, *29*, 40-52.

Durlak, J. , & DuPre, E. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*(3-4), 3-4.

Fixsen, D. L., Naoom, S. F., Blasé, K. A., Friedman, R. M., & Wallace, F. (2005). Implementation research: A synthesis of the literature. Tampa, FL: University of South Florida. Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Forness, S. R., Serna, L. A., Nielsen, E., Lambros, K., Hale, M. J., & Kavale, L. A. (2000). A model for early detection and primary prevention of emotional or behavioral disorders. *Education and Treatment of Children,23,* 325–345.

Fox, L., Carta, J., Strain, P. S., Dunlap, G., and Hemmeter, M. L. (2010). Response to Intervention and the Pyramid Model. *Infants and Young Children, 23*, 3-14.

Fox, L., Dunlap, G., Hemmeter, M.L., Joseph, G., & Strain, P. (2003). The Teaching Pyramid: A model for supporting social competence and preventing challenging behavior in young children. *Young Children, 58*, 48-53.

Gebbie, D.H., Ceglowski, D., Taylor, L.K., & Miels, J. (2012). The role of teacher efficacy in strengthening classroom support for preschool children with disabilities who exhibit challenging behaviors. *Early Childhood Education Journal, 40*, 35-46.

Gilliam,W. (2005). *Prekindergarteners left behind: Expulsion rates in state prekindergarten systems*. New York: The Foundation for Child Development.

Gormley, W. , Phillips, D. , Newmark, K. , Welti, K. , & Adelstein, S. (2011). Social-emotional effects of early childhood education programs in tulsa. *Child Development*, *82*, 2095-2109.

Hale-Jinks, C., Knopf, H., & Kemple, K. (2006). Tackling teacher turnover in child care: Understanding causes and consequences, identifying solutions. *Childhood Education, 82*, 219-226.

Hamre, B., Justice, L., Pianta, R., Kilday, C., Sweeney, B., et al. (2010). Implementation fidelityof myteachingpartner literacy and language activities: Association with preschoolers' language and literacy growth. Early Childhood Research Quarterly, 25(3), 329-347.

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.

Hanley, G. , Heal, N. , Tiger, J. , & Ingvarsson, E. (2007). Evaluation of a classwide teaching program for developing preschool life skills. *Journal of Applied Behavior Analysis*, *40*, 277-300.

Hansford, A., Zilber, I., LaRue, R.H., & Weiss, M.J. (2010). *The Behavior Analyst Today, 11*, 59-76.

Hastings, R.P. & Bham, M.S. (2003). The relationship between student behaviour patterns and teacher burnout. *School Psychology International, 24*, 115-127.

Hebert-Myers, H. , Guttentag, C. , Swank, P. , Smith, K. , & Landry, S. (2006). The importance of language, social, and behavioral skills across early and later childhood as predictors of social competence with peers. *Applied Developmental Science*, *10*, 174-187.

Hemmeter, M.L. & Fox (2008). *Teaching Pyramid Observation Tool for Preschool Classrooms (TPOT) Research Edition.* Washington, DC: U.S. Department of Education, Institute of Education Sciences.

Hemmeter, M. , Fox, L. , Jack, S. , & Broyles, L. (2007). A program-wide model of positive behavior support in early childhood settings. *Journal of Early Intervention*, *29*(4), 337-355.

Hemmeter, M.L., Ostrosky, M.M., & Fox, L. (2006). Social emotional foundations for early learning: A conceptual model for intervention. *School Psychology Review 35*, 583-601.

Hemmeter, M., Santos, R. , & Ostrosky, M. (2008). Preparing early childhood educators to address young children's social-emotional development and challenging behavior: A survey of higher education programs in nine states. *Journal of Early Intervention*, *30*(4), 321-340.

Hojnoski, R. , Gischlar, K. , & Missall, K. (2009). Improving child outcomes with data-based decision making: Collecting data. *Young Exceptional Children*, *12*(3), 32-44.

Hojnoski, R., & Wood, B. (2012). Challenging behavior and early academic skill development: An integrated approach to assessment and intervention. *Young Exceptional Children*, *15*(4), 29-40.

Humphrey, N., Kalambouka, A. , Wigelsworth, M. , Lendrum, A. , Deighton, J. , & Wolpert, A. (2011). Measures of social and emotional skills for children and young people: A systematic review. *Educational and Psychological Measurement*, *71*, 617-637.

Hunt, P., Soto, G., Maier, J., & Doering, K. (2003). Collaborative teaming to support students at risk and students with severe disabilities in general education classrooms. Exceptional Children, 69(3), 315-332.

Ishuin, T. (2009). Linking brief functional analysis to intervention design in general education settings. *The Behavior Analyst Today, 10*, 47-53.

Jones, S.M., & Bouffard, S.M. (2012). Social and emotional learning in schools: From programs to strategies. *Socierty for Research in Child Development Social Policy Report, 26*(4).

Kandakai & King (2002). Preservice teachers' perceived confidence in teaching school violence prevention. *American Journal of Health Behavior, 26*, 343-353.

Kalb, L. , & Loeber, R. (2003). Child disobedience and noncompliance: A review. *Pediatrics*, *111*, 641-652.

Kodak, T., Fisher, W., Clements, A., Paden, A., & Dickes, N. (2011). Functional assessment of instructional variables: Linking assessment and treatment. *Research in Autism Spectrum Disorders*, *5*, 1059-1077.

Kruizinga, I., Jansen, W., Carter, A.S., & Raat, H. (2011). Evaluation of an early detection tool for social-emotional and behavioral problems in toddlers: The brief infant toddler social and emotional assessment—A cluster randomized trial. *BMC Public Health,11*, 494-499.

McClelland, M. (2006). The impact of kindergarten learning-related skills on academic trajectories at the end of elementary school. *Early Childhood Research Quarterly, 21*, 471–490.

McClelland, M., Conner, C., Jewkes, A., Cameron, C., Farris, C., & Morrison, F. (2007). Links between behavioral regulation and preschoolers' literacy, vocabulary, and math skills. *Developmental Psychology, 43*, 947-959.

Menzies, H. & Lane, K.L. (2011). Using self-regulation strategies and functional assessment-based interventions to provide academic and behavioral support to students at risk within three-tiered prevention models of prevention. *Preventing School Failure: Alternative Education for Children and Youth, 55,* 181-191.

Merrell, K.W. (2001). Assessment of children's social skills: Recent developments, best practices, and new directions. *Exceptionality, 9*, 1-18.

Merrell, K.W. (2010). Better methods, better solutions: Developments in school-based behavioral assessment. *School Psychology Review, 39*, 422-426.

National Institute for Early Education Research. (2010). *Brief report: Funding cuts to state-funded prekindergarten programs in FY10 & 11*. New Brunswick, New Jersey: D. Epstein & S. Barnett.

Odom, S. (2009). The tie that binds: Evidence-based practice, implementation science, and outcomes for children. *Topics in Early Childhood Special Education*, *29*, 53-61.

Odom, S. , Brantlinger, E. , Gersten, R. , Horner, R. , Thompson, B. , et al. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children*, *71*, 137-148.

Odom, S., McConnell, S.R., & Brown, W.H. (2008). Social competence of young children: Conceptualization, assessment, and influences. In W.H. Brown, S. Odom, & S.R. McConnel (Eds.) *Social competence of young children: Risk, disability & intervention* (pp. 3-29). Baltimore, MD: Brookes.

Perry, D., Dunne, M., McFadden, L., & Campbell, D. (2008). Reducing the risk for preschool expulsion: Mental health consultation for young children with challenging behaviors. *Journal of Child and Family Studies*, *17*, 44-54.

Perry, D. Holland, C., Darling-Kuria, & Nadiv (2011). Challenging behavior and expulsion from child care: The role of mental health consultation. *Zero to Three, 32*(2), 4-11.

Powell, D., Fixsen, D., Dunlap, G., Smith, B., & Fox, L. (2007). A synthesis of knowledge relevant to pathways of service delivery for young children with or at risk of challenging behaviors. *Journal of Early Intervention, 29*, 81-106.

Reynolds, A.J., Temple, J., Robertson, D., & Mann, E. (2001). Long-term effects of an early childhood intervention on educational achievement and juvenile arrest: A 15-year follow-up of low-income children in public schools. *Journal of the American Medical Association, 285*, 2339-2346.

Rimm-Kaufman, S. E., Pianta, R.C., & Cox, M. J. (2000).Teacher's judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, *15*, 147–166.

Saldaña, J. (2009). *The Coding Manual for Qualitative Researchers*. Thousand Oaks: Sage Publications.

Sieff, K. (2011, April 25). Study finds funding for early childhood-education declined between 2009 and 2010. *The Washington Post*. Retrieved from http://www.washingtonpost.com/local/education/study-finds-funding-for-early-childhood-education-declined-between-2009-and-2010/2011/01/24/AFRz5TmE_story.html

Squires, J., & Bricker, D. (2007*). An Activity-Based Approach to Developing Young Children's Social and Emotional Competence*. Baltimore: Paul Brookes.

Squires, J., Waddell, M., Clifford, J., Funk, M. K., Hoselton, R., & Ching-I Chen (2013, in press). A Psychometric Study of the Infant and Toddler Intervals of the Social Emotional Assessment Measure. *Topics in Early Childhood Special Education.*

Squires, J., Waddell, M., Clifford, J., Funk, M., Hoselton, R., Chen, C., & Pribble, L. et al. (2012). *Project SEAM: Preventing Behavior Disorders and Improving Social-Emotional Competence for Infants and Toddlers with Disabilities: Final report*. Grant#: R324A070255. Washington, D.C. Institute of Education Sciences.

Stormont, M. (2002). Externalizing behavior problems in young children: Contributing factors and early intervention. *Psychology in the Schools, 39*, 127-138.

Stormont, M., Lewis, T., & Beckner, R. (2005). Positive behavior support systems: Applying key features in preschool settings. *Teaching Exceptional Children*, *37*(6), 42-49.

Stormont, M., Lewis, T. & Smith, S.C. (2005). Behavior support strategies in early childhood settings: Teachers' importance and feasibility ratings. *Journal of Positive Behavior Interventions, 7*, 131-139).

Stormont, M., Smith, S. C., Lewis, T. J. (2007). Teacher implementation of precorrection and praise statements in Head Start classrooms as a component of a program-wide system of positive behavioral support. Journal of Behavioral Education, 16, 280–290.

Stoughton, E.H. (2007). "How will I get them to behave?": Pre service teachers reflect on classroom management. *Teaching and Teacher Education, 23*, 1024-1037.

Tiano, J. D., & McNeil, C. B. (2006). Training head start teachers in behavior management using parent-child interaction therapy: A preliminary investigation. *Journal of Early and Intensive Behavior Intervention*, *3*, 220–233.

Tremblay, R.E. (2000). The development of aggressive behavior during childhood: What have we learned in the past century? *International Journal of Behavioral Development, 24*, 129-141.

Tout, K., Zaslow, M. & Berry, D. (2006). Quality and qualifications: Links between professional development and quality in early care and education settings. In M. Zaslow & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development* (77-110). Baltimore: Brookes.

Upshur, C., Wenz-Gross, M., & Reed, G. (2009). A pilot study of early childhood mental health consultation for children with behavioral problems in preschool. *Early Childhood Research Quarterly*, *24*, 29-45.

Vaughan Van Hecke, A., Mundy, P., Acra, C., Block, J., Delgado, C., Parlade, M.,…Pomares, Y. (2007). Infant joint attention, temperament, and social competence in preschool children. *Child Development*, *78*, 53-69.

Vitiello, V. , Booren, L. , Downer, J. , & Williford, A. (2011). Variation in children's classroom engagement throughout a day in preschool: Relations to classroom and child factors. *Early Childhood Research Quarterly*, *27*, 210-220.

Wachs, T. , Gurkas, P. , & Kontos, S. (2004). Predictors of preschool children's compliance behavior in early childhood classroom settings. *Journal of Applied Developmental Psychology*, *25*, 439-457.

Walker, H. M., Ramsey, E., & Gresham, F. M. (Eds.). (2004). *Antisocial behavior in school: Evidence-based practices* (2nd ed.). Belmont, CA: Wadsworth.

Whitebook, M., & Sakai, L. (2003). Turnover begets turnover: An examination of job and occupational instability among child care staff. *Early Childhood Research Quarterly, 18*, 273-293.

Whitted, K. S. (2011). Understanding how social and emotional skill deficits contribute to school failure. Preventing School Failure, 55, 10–16.

Willoughby, M., Kupersmidt, J., Voegler-Lee, M., & Bryant, D. (2011). Contributions of hot and cool self-regulation to preschool disruptive behavior and academic achievement. *Developmental Neuropsychology, 36,* 162-180.

Wilson, M. (2005). Constructing measures: An item response modeling approach. New York, NY: Psychology Press.

Winton, P. (2000). Early childhood intervention personnel preparation: Backward mapping for future planning. *Topics in Early Childhood Special Education*, 20 (2), 87-94.

Winton, P. (2010). Professional development and quality initiatives: Two essential components of an early childhood system. In P.W. Weseley & Buysse, V. (Eds.), *The quest for quality: Promising innovations for early childhood programs* (113-129).

Wolery, M. , & Hemmeter, M. (2011). Classroom instruction: Background, assumptions, and challenges. *Journal of Early Intervention*, *33*(4), 371-380.

Wood, B., Blair, B., & Ferro, J. (2009). Young children with challenging behavior: Function-based assessment and intervention. *Topics in Early Childhood Special Education, 29*, 68-78.

Wood, B., Ferro, J., Umbreit, J. & Liaupsin, C. (2011). Addressing the challenging behavior of young children through systematic function-based intervention. *Topics in Early Childhood Special Education*, *30*, 221-232.