DEVELOPMENT, VALIDATION, AND UTILITY OF FAMILY-CENTERED PRACTICES PROFILE

by

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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

December 2013

DISSERTATION APPROVAL PAGE

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Title: Development, Validation, and Utility of Family-Centered Practices Profile

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Degree awarded December 2013

DISSERTATION ABSTRACT

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Doctor of Philosophy

Department of Special Education and Clinical Sciences

December 2013

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Family-centered practice is a hallmark of early intervention/early childhood special education services. However, there are few validated and user-friendly instruments focused on effective and measurable family-centered approaches. A new measure, the Family-Centered Practices Profile, was conceptualized, designed, and validated in an effort to enhance family-centered practices for families and children with special needs. The results of the psychometric study were summarized.

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PUBLICATIONS:

Acar, S., Hansen, S., Dolata, J., & Chen, C. (*in press/accepted for publication*). An overview of developmental screening: implications for practice.

ACKNOWLEDGMENTS

I would like to express my deepest gratitude to my advisor, Dr. Squires, for her excellent guidance, feedback, and patience. I would like to thank to my committee members Dr. Eisert, Dr. Machalicek, and Dr. Neville for their encouraging words, thoughtful criticism, and time during the research process. I would like to thank to families, professionals, and service providers for their valuable input. My research would not have been possible without their helps.

I would like to thank to my friends in the Early Intervention Program for their encouragement and support. Many thanks to Elif Isbell and her family.

I would like to thank to my two brothers, two great fishermen. Finally, I would like to thank my husband, Erkan, for his love, support, understanding, and belief in me.

This research was supported by Davis-Bricker Grant at the University of Oregon.

For my parents…

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CHAPTER I

INTRODUCTION

A cornerstone of early intervention (EI) and early childhood special education (ECSE) services for young children with special needs and their families is the concept of family-centered practice (Allen & Petr, 1996; Dunst, 2002; Epley, Summers, Turnbull, 2011). The value of family-centered practice has become widely recognized by the policymakers, professional organizations, teacher preparation programs, and researchers (Fults & Harry, 2011; Mandell & Murray, 2009; Murray & Mandell, 2006; Sandall, Hemmeter, Smith, & McLean, 2000; Sewell, 2012; Summers, Hoffman, Marquis, Turnbull, et al., 2005; Wilson & Dunst, 2005). Assessing the extent to what degree family-centered practice is implemented is critical. This process improves partnership between service providers and families, tracks service providers' individual and group progress, and identifies appropriate supports for early childhood education programs. Although there have been studies to measure family-centered practices in EI/ECSE, there is a need for investigating how to measure service providers' implementation of family-centered practices.

According to the Office of Special Education Programs (OSEP) report, 453,406 infants and toddlers with disabilities and at risk for disabilities from birth through age three were served under the Individuals with Disabilities Education Act (IDEA) Part C (United States Department of Education, 2011). This number represented 2.79% of the birth-through-age-two population in the United States (IDEA Data, 2011). Part C of the IDEA (2004) mandates at a minimum for each infant or toddler with a disability and his/her family (a) a family-directed assessment of the resources, priorities, and concerns

of the family and the identification of the supports and services necessary to enhance the family's capacity to meet the developmental needs of the infant or toddler [20 U.S.C. 1436 (a) (2)], and (b) a statement of the family's resources, priorities, and concerns relating to enhancing the development of the family's infant or toddler with a disability [20 U.S.C. 1436 (d) (2)]. As research has shown, because of an increasing number of young children with special needs and their families receiving EI services, failing to adequately assess family-centeredness of those services is unacceptable.

The development of professional standards and recommended practices [e.g., National Association for the Education of Young Children (NAEYC) and Division for Early Childhood (DEC)] plays a significant role in promoting family-centered practices nationwide. The underlying principles of family-centered practices include supporting active parent participation in early childhood education (Dunst, Boyd, Trivette, & Hamby, 2002; Dunst, 2002; Dunst, Trivette, & Hamby, 2007; Woods, Wilcox, Friedman, & Murch, 2011); respecting parents' diverse backgrounds (Fults & Harry, 2011; Iversen, Shimmel, Ciacera, & Prabhakar, 2003; Tomasello, Manning, & Dulmus, 2010); and individualizing services according to the family's concerns, priorities, and resources (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004; Epley, Summers, & Turnbull, 2011). The common element of family-centered practice in the field of EI/ECSE is *the family as the unit of attention*. Key professional organizations support family-centered practices as critical for optimal outcomes for young children and their families. Therefore, it is essential to study how EI/ECSE service providers implement services in a family-centered approach.

In order to provide family-centered practices, EI/ECSE service providers must be taught to apply the philosophies, beliefs, and principles associated with family-centered practice, which have been accepted as a part of program quality (Fults & Harry, 2011; Mandell & Murray 2009; Murray & Mandell, 2006; Sewell, 2012). The chief relationship between classroom quality and child, as well as family outcomes, has been particularly well documented over the ten years (Head Start Bureau, 2003). Increasingly, state Quality Rating and Improvement System (QRIS) standards and criteria reflect the necessity of involving families as partners to support high-quality early childhood education programs. While states are taking different approaches to defining and documenting family engagement standards, there is a need to assess the quality of family-centered practices to achieve higher levels of quality. EI/ECSE service providers need a valid and useful tool to monitor their individual progress, assess quality of family-centered practices, and provide domain specific support.

However, in contrast with the importance of family-centered practice in EI/ECSE, only a limited amount of research has studied aspects of family-centered practice (Summers, et al., 2005; Wilson & Dunst, 2005). Research has focused on using parent and service provider satisfaction measures, rather than developing observable items that reflect implementation of family-centered practice (NFI, 2000, 2006, 2010; Summers, et al., 2005). With regard to the focus on assessment of family-centered practices, very few studies provided solid evidence on psychometric measures of the tools (Summers, et al., 2005). Therefore, an efficient, valid, and comprehensive tool is needed that will identify observable family-centered practices, and better assist service providers in providing services from a family-centered approach.

The present study built on a recognized premise of what constitutes family-centered practice in EI/ECSE programs (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004; Dunst, 2002; Dunst, Boyd, Trivette, & Hamby, 2002; Dunst, Trivette, & Hamby, 2007; Epley, Summers, & Turnbull, 2011; Espe-Sherwindt, 2008; Fults & Harry, 2011; Woods, Wilcox, Friedman, & Murch, 2011). In response to a lack of validated instruments designed specifically to measure family-centered practices, a new measure, the Family-Centered Practices Profile was conceptualized and validated. The purpose of this study is to describe the development and validation of the Family-Centered Practices Profile. First, the theoretical background of implementing family-centered practices in the field of EI is described. Second, the steps involved in designing the measure are explained followed by results of this study for validating the profile.

This research dissertation study adds to research on conceptualization and validation of a tool that aims to assess family-centered practices in EI/ECSE. To provide a sufficient understanding of the underlying legislations, theories, and research, the next chapter focuses on a detailed literature review. Family-centered practices are described through the discussion of theoretical underpinnings, recommended practices and personal preparation standards, and measures to assess family-centered practices.

CHAPTER II

REVIEW OF LITERATURE

Background literature related to family-centered practice in EI/ECSE is examined. The first section of the chapter describes the theoretical perspectives that guide and shape a family-centered approach. The second section explains Part C of IDEA, parent participation in Part C, and family-centered practices in EI. The third section examines personnel preparation programs related to family-centered practice and commitment of professional organizations in EI/ECSE related to family-centered practice. Lastly, measures of family-centered practice in EI/ECSE are examined.

Theoretical Perspectives

Two main theoretical perspectives have shaped and directed the conceptualization and development family-centered practices in EI/ECSE. These include (a) family systems theory and (b) ecological model.

Family Systems Theory

In the 1960s Bowen introduced family systems theory, which was a synthesis of social-ecological model and transformational theory. According to the family systems theory, a family is a complex social system and family members cannot be studied in isolation from one another (Bowen, 1966; 1978; Friend & Cook, 2002). Families are viewed as systems of interconnected, interdependent, and reactive individuals. A change in family routine affects all members of the family. For instance, inclusion of a service animal into a child's life can enhance child's life quality physically, socially, and emotionally. Furthermore, having a service animal in the house may involve additional responsibilities for parents such as trips to veterinarian or additional pet insurance.

Family systems theory is a synthesis of research examining: (a) family structure (Goldenberg & Goldenberg, 2003; Turnbull, Summers, & Brotherson, 1986), (b) family interaction (Goldenberg & Goldenberg, 2003; Turnbull & Turnbull, 1990; Turnbull et al., 2006), (c) family functions (Turnbull & Turnbull 1990; Turnbull et al., 2006), and (d) family life cycle (Friend & Cook, 2002; Goldenberg & Goldenberg, 2003; Seligman & Darling, 2007).

Family structure refers to the unique range of family characteristics. These factors include membership characteristics, cultural style, ideological style, and family size. Family interaction is comprised of several subsystems: spousal, parental, and sibling, as well as features including boundaries, cohesion, adaptability, and problematic family systems. Family functions can be categorized into eight areas: (1) economic, (2) day care/health care, (3) recreation, (4) socialization, (5) self-identity, (6) affection, (7) educational/ vocational, and (8) spiritual (Seligman & Darling, 2007).

The final component of family systems theory is the family life cycle, which includes a series of developmental stages or transitions and represents change. Children go through several developmental stages including early childhood, school age, teenage, and adulthood. Each stage may require different responsibilities from caregivers. Families may often experience turmoil at each stage and maintain equilibrium until the next stage. For example, transitioning from Part C (birth to 3 years) to Part B (3 to 5 years) may be challenging for the family in the beginning, and they may need to work until they stabilize their lives again. Service providers can make the transition process and preschool experience meaningful and productive. For instance, preparing families about their rights and service obligations for their child under Part B of IDEA prior to the

transition meeting and planning visits to neighborhood preschools may organize a smooth transition.

In summary, a family is a complex system and service providers need to individualize their services to address unique family interests and needs. While working with young children with special needs, knowledge of (a) family characteristics such as cultural background and family size, (b) family interaction such as spousal and parental, (c) family functions such as socio-economic status of the family and access to health care, and (d) family life cycle may reveal more meaningful options for parent participation and in EI/ECSE. By studying family systems theory, service providers can be better prepared to provide effective family-centered services (Christian, 2006).

Ecological Model

An ecological perspective has much to contribute to the concept of family-centered practice. Bronfenbrenner's ecological model gives a map for directing a path through the interplay of multifaceted systems in the family's environment. Following the work of Bronfenbrenner, EI/ECSE service providers can recognize and respond to the parent's experiences as micro-, meso-, exo-, macro, and chronosystems "as a set of nested structures, each inside the next, like a set of Russian dolls" (Bronfenbrenner, 1979, p.22). The ecological model promotes the perspective that unique environmental systems affect each individual (Bronfenbrenner, 1979, 1989). The systems in the ecological model are dynamic, interactive, and bi-directional. By understanding the components of the ecological model, service providers can effectively implement family-centered practices.

The microsystem (Bronfenbrenner, 1979) refers to the most immediate environment of the family; this core layer stands as the adult's venue for learning from

each other's perspectives. The microsystem allows for direct interactions and adults have active roles. At the microsystem level service providers establish and maintain a rapport with families. For instance, early interventionists can use multiple methods to communicate with parents to understand their concerns, priorities, and resources regarding their child's development and learning.

The mesosystem refers to the interconnections between microsystems. These connections themselves construct a system. One example is the case of a parent-toddler classroom and a community-based EI program. Does the early interventionist post pictures of families and their children around the classroom? Does the early interventionist visit the child at his/her home environment? Do the child's parents know the speech/language pathologist in their child's classroom? Further examples may include sharing resources with families. For instance, when feasible, an early interventionist may utilize available community resources to address family needs. Moreover, an early interventionist may share the contact information of a local parent-support group with the family, and in turn the parents may connect to other parents who have similar experiences.

The exosystem involves settings or events that influence the family even though the family has no direct part in them. A family can experience a challenging or an empowering experience at the exosystem. For example, on one hand, an EI program may organize a series of parent training sessions that are tailored to parents' work schedules and provide complimentary childcare. On the other hand, training sessions may not be individually responsive to the parents' immediate needs and interests so that attending to a training session may be a helpful experience for parents.

The macrosystem refers to the cultural beliefs, societal values, and political trends. The macrosystem may influence the frequency and quality of family-centered practices in EI/ECSE programs. For instance, a state's QRIS family partnership standards may improve implementation of family-centered practices at the state level. Indicators such as the use of bulletin boards, availability of resources to communicate with families in their primary language, existence of a parent advisory board, and the use of surveys to elicit information from parents can enhance communication between service providers and parents. Finally, the chronosystem refers to the environmental events and transitions over the life course. For example, early positive relationships between an EI/ECSE team and caregivers may influence caregivers' future attitudes and beliefs towards special education services.

In conclusion, the family systems and ecological model plays a critical role in understanding relationships between service providers and parents. Two main themes can be highlighted within these models. The first is the interaction of parents with EI/ECSE service providers in terms of family functions, structure, and life cycle. The second is the nested and bidirectional systems in the family's environment. These theoretical foundations have undergirded efforts by the EI/ECSE field to develop family-centered policies, practices, and promising research studies.

Part C of IDEA

Remarkable progress has been achieved in the development of comprehensive and coordinated services for families who have young children with special needs. Congress passed Part C of IDEA in 1986 in recognition of "an urgent and substantial need" to: (a) enhance the development of young children with disabilities; (b) reduce educational

charges by decreasing the need for special education through EI; (c) decrease the likelihood of institutionalization, and expand independent living; and, (d) support families to meet their child's needs. Part C of IDEA lays out an interagency approach that supports states in providing comprehensive EI services for infants and toddlers (birth through age three) with developmental delays and disabilities, and their families. To participate in Part C, states must confirm that EI programs will be available to every eligible child and his/her family. States, however, have some discretion in defining the criteria for eligibility, including whether or not to serve at risk children and their families. As a result, criteria for eligibility may differ from state to state. Currently, all states and US territories are participating in the Part C program.

EI programs are required to provide a set of coordinated services that support young children, with diagnosed disabilities, developmental delays or substantial risk of significant delays to assist them in maximizing their development. Eligibility is determined by evaluating the child (with parents' consent) to determine if the child has a delay in development or a disability. Eligible children can receive EI services starting at birth through the third birthday.

Part C of IDEA broadly defines the term developmental delay: the child is behind age expectations in development: cognitive, physical (including vision and hearing), communication, social-emotional, and/or adaptive. Eligibility criteria vary from state to state, and each state is required to (a) describe the evaluation and assessment procedures that will be used to document a child's development in each of the five developmental areas, and (b) specify the level of delay in functioning that constitutes a developmental delay in each of the five developmental areas. For example, in Oregon for a young child

suspected of experiencing a developmental delay, the child shall meet one of the following minimum criteria: (a) two standard deviations of more below the mean in one or more developmental areas, or (b) one and half standard deviations below the mean in two or more of the developmental areas.

Parent Participation in Part C

According to the IDEA 2004, "Congress finds that there is an urgent and substantial need to enhance the capacity of families to meet the special needs of their infants and toddlers with disabilities" [20 U.S.C.1431(a)(4)]. In 2011, the U.S. Department of Education publicized the final regulations for the EI services under Part C and family needs are further recognized and underscored.

The Individualized Family Service Plan (IFSP) is a written plan that is developed under Part C for an eligible infant or toddler. It outlines all of the EI services that the child and family will receive. Families have the right to be involved at every step of the EI process, from the initial screening, to the evaluation of their child, to the writing of the IFSP goals and objectives, to selecting the service delivery model, intensity, and frequency of the services. One guiding principal of the IFSP is that the family is a child's greatest resource that a young child's needs and interests are intently linked to the needs and interests of his or her family.

To develop IFSP for infants and toddlers, Part C requires a family-based assessment. Families must be informed of their rights, invited to be a part of the IFSP team, and receive a review of the IFSP at least every six months. Parents have the right to accept or refuse evaluations for eligibility determination, assessments, and/or services. Furthermore, if the family so desires, the IFSP must include procedures to address family identified needs as well as child needs. Through the IFSP process, family members and

EI/ECSE service providers work in a team effort as *equal partners* to plan, implement, and evaluate services specific to the family's concerns, priorities, and resources.

Part C of IDEA 2004 incorporates specific requirements to support meaningful and functional parent involvement. Two noticeable requirements are the prior written notice [303.420 (a)] and informed written parental consent [303.421(a)]. Prior written notice obliges the EI system to provide a reasonable time to parents before initiating a meeting about the identification, evaluation, placement, and EI service delivery. Similarly, informed written parental consent requires the EI system obtain parental consent about parents; child and family involvement in EI when it is being proposed, refused, initiated, or changed at key points in time. An important point of the process is that the parental consent must be written in a language understandable to the general public and provided in the parent's native language or other mode of communication. The right to be informed and the right to give or refuse written consent for EI services are solid evidence supporting family-centered practices in terms of acknowledging their authority, responsibility, and manifesting their *equal* partnership in the EI process.

Early Intervention

The concept of family-centered practice has been espoused and developed by numerous disciplines, including health care, psychology, and social work. Family-centeredness is an umbrella term that has been used to describe a form of service delivery to families that have young children, and often used interchangeably with terms such as *family-friendly, family-oriented, and family-focused* (Allen & Petr, 1996; Bailey, Buysse, Smith, & Elam, 1992, Birt, 1956).

The term "family-centered practice" refers to a particular set of principles, beliefs, and attitudes for supporting and strengthening family capacity to enhance and promote

child development and learning (Dunst, 2002). The essential assumption of a family-centered approach is that during the EI process young children cannot be considered apart from their families (Bailey, Rapsa, & Fox, 2012). The components of family-centered services include: (a) equal partnerships and collaboration (Dunst, Boyd, Trivette, & Hamby, 2002; Dunst, 2002; Dunst, Trivette, & Hamby, 2007; Espe-Sherwindt, 2008; Woods, Wilcox, Friedman, & Murch, 2011), (b) individualized intervention for each family and child (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004; Epley, Summers, & Turnbull, 2011), (c) culturally, linguistically, socially, and economically sensitive and responsive practices (Fults & Harry, 2011; Iversen, Shimmel, Ciacera, & Prabhakar, 2003; Tomasello, Manning, & Dulmus, 2010), (d) skilled and trained service providers in terms of effective communication, problem-solving, and flexibility (McBride & Brotherson, 1997; Murray & Mandell, 2006; Sewell, 2012), (e) strength-based intervention (Trivette, Dunst, Hamby, 2010; Turnbull, Summers, Turnbull, Brotherson, Winton, Roberts, et al., 2007), and (f) supportive program administrators (Epley, et al., 2011; Mandell & Murray, 2009).

After the Government Performance Results Act of 1993 that required agencies to engage in project management tasks such as setting goals, measuring results, and reporting their progress, measuring family outcomes has became an important issue. OSEP, of the U.S. Department of Education, mandated the measurement of family outcomes for early intervention programs (Early Childhood Outcomes Center, 2005). States were asked to document the extent to which early intervention has helped families: (a) know and understand their rights, (b) communicate their children's needs, and (c) help their children develop and learn. This requirement motivated many researchers in the

field to develop indicators to assess family outcomes, family perceptions, and family-professional partnerships (Bailey, Bruder, et al., 2006).

Cumulative evidence showing the positive outcomes expected as a result of working with families has been amassed (Dunst, Trivette, & Hamby 2007; Friend, Summers, & Turnbull, 2009). Dunst, Trivette, and Hamby (2006) reported a meta-analysis of 18 family-centered practice studies, which explored the identifiable benefits of family-centered practices in EI and family support programs. The outcomes included measures of self-efficacy beliefs, program participant satisfaction, parenting capabilities, parent and family well-being, social supports and resources, and child behavior and functioning.

Mahoney and Bella (1998) examined the annual effects of a family-centered EI program on child and family outcomes. The study measured children's developmental functioning, mothers' styles of interacting with their children, family functioning, and maternal stress both at the beginning and end of the project. Analyses of outcomes in relationship to two family-centered concepts -"comprehensiveness of family services" and "responsiveness of intervention services to family needs"- generated evidence that intervention effectiveness was related to these parameters.

Furthermore, several studies focused on exploring the effects of empowering families during decision-making and service delivery processes. Overall, the results indicated that family-centered practices significantly increased parent-child interaction and improved family communication and cohesion (Dunst, Bruder, & Trivette, 2001; Kim & Mahoney, 2003; Mahoney & Perales, 2003, 2005). Results of a meta-analysis of 18 studies denoted that the use of family-centered practice was strongly related to self-

efficacy beliefs, program satisfaction, and parent perceptions of child behavior and present level of functioning (Dunst, Trivette, & Hamby, 2006). In addition to positive parent-child outcomes, family-centered practices provide a foundation for strengthening parent-professional relationships and engaging families in early childhood and family support programs.

Personnel Preparation Programs

Over the last two decades, EI/ECSE programs have increasingly shifted toward a family-centered orientation, emphasizing that caregivers are equal partners of the EI/ECSE process. Furthermore, organizations such as DEC and NAEYC proposed that families should participate in their child's development and learning. Although the idea of family-centered practices is repeatedly advocated in the literature, limited scientific efforts have investigated the evidence of family-centered practices in personnel preparation programs (Fults & Harry, 2011; Mandell & Murray 2009; Murray & Mandell, 2006; Sewell, 2012).

To develop a deep understanding of family-centered practice, service providers need addition content knowledge and meaningful practicum opportunities, however the acquisition of specific skills that may not have been addressed during pre-service preparation (Mandell & Murray 2009; Murray & Mandell, 2006). Several studies have focused on early childhood teacher education programs' efforts toward training preservice teachers with a family-centered approach (Fults & Harry, 2011; Murray & Mandell, 2006; Pretti-Frontzcak, Giallourakis, Janas, & Hayes, 2002).

Synder and McWilliam (1999) investigated graduate student outcomes in a preservice training course where Case Method of Instruction (CMI) was the primary

instructional strategy. Sixty-seven graduate students completed pre- and post-test measures to evaluate their attitudes about family-centered EI and their ability to apply family-centered principles to case situations. The study revealed statistically significant and meaningful improvements in student attitudes and application skills. These results imply that more specific trainings need to be provided on implementation of family-centered practices.

Similarly, Pretti-Frontzcak, Giallourakis, Janas, and Hayes (2002) studied an early childhood intervention graduate training program's efforts in preparing family-centered personnel. The results revealed that preservice students completing coursework based on 24 family-centered core competencies perceived themselves as skilled in implementing family-centered practices as measured by course evaluations, self-reports, open-ended interviews, and student journal entries. These results imply that developing a curriculum that incorporates a family-centered approach is an important step to prepare students to work with families and their young children with special needs.

In another study, Murray and Mandell (2006) studied the use of family-centered practice by graduates of two OSEP funded, ECSE personnel preparation programs that embedded family-centered approach throughout the required course work. Nineteen graduate students were interviewed to identify their perspectives about and use of family-centered practices in their work environments. Participants described using family-centered practices, but the majority of them listed barriers to using family-centered practices, including lack of support from colleagues and administrators and lack of policies related to working with families. Consistent with previous studies, the results of this study indicate that training of preservice teachers with a focus on family-centered

practice promotes implication of family-centered practice while working with families. These results also imply that administrators and federal and state policy makers need to recognize and institutionalize family-centered policy and practice.

Furthermore, Fults and Harry (2011) investigated the effects of graduate level ECSE coursework designed to incorporate instruction in family-centered principles and diversity responsiveness. The analyses yielded both qualitative and quantitative results from pre-and post evaluations, structured student interviews, and students' final reflections. Results indicated that students enriched their understanding of family-centered practices and responsiveness to diversity.

In addition to the presence of a strong rationale for family-centered practice, a growing body of research has tied the efficacy of teacher training programs to implementation of family-centered practice. It appeared that pre-service students gained the beliefs, knowledge, and skills necessary to work effectively with families in their work settings. Although these results provide encouraging information, they lack use of standardized measures to assess service providers' implementation of family-centered practices. Therefore, additional research is needed on assessment of family-centered practice with standardized measures that provide generalizable results.

Professional Organizations

Key professional organizations and programs have created performance standards and recommended practices for EI/ECSE and early childhood education programs. These standards include a set of guidelines focusing on family involvement, parent engagement, and family-centered practices. Statements about family-centered practice by professional organizations may guide service providers' understanding of the required best practices

in the field, encourage reflection of family-centered practices when working with families, and provide a set of best possible services to families and their children.

Division of Early Childhood Education (DEC)

DEC, one of seventeen divisions of the Council for Exceptional Children (CEC), supports family-based practices as critical for improving educational outcomes for young children with special needs from birth to six years (Sandall, Hemmeter, Smith, & McLean, 2000). Trivette and Dunst (2000, p. 107) defined family-based practices in the following way:

> Family-based practices provide or mediate the provision of resources and supports necessary for families to have the time, energy, knowledge, and skills to provide their children learning opportunities and experiences that promote child competence and development.

Seventeen family-based recommended practices for EI/ECSE programs were identified and grouped into four categories: (1) shared responsibility and collaboration (i.e., family members and professionals jointly develop appropriate family-identified outcomes); (2) strengthening family functioning (i.e., practices, supports, and resources provide families with participatory experiences and opportunities promoting choice and decision making); (3) individualized and flexible practices (i.e., resources and supports match each family member's identified priorities and preferences); and (4) strengths- and asset-based practices (i.e., practices, supports, and resources build on existing parenting competence and confidence).

In addition to recommended practices, DEC (2002) published a position statement on responsiveness to family cultures, values, and language. The position statement

summarizes that individualized services should respect and respond to unique human differences in race, ethnicity, culture, language, education, income, family type, geographic location, ability, and other characteristics.

National Association for the Education of Young Children (NAEYC)

Founded in 1926, NAEYC is the world's largest organization working on behalf of young children. Family-centered principles are well articulated in the NAEYC's position statements: (1) *Developmentally Appropriate Practice In Early Childhood Programs Serving Children From Birth Through Age 8* (NAEYC, 2009), (2) *Developing and Implementing Effective Public Policies to Promote Early Childhood and School-Age Care Program Accreditation* (NAEYC, 1999), and (3) NAEYC Standards for Early Childhood Professional Preparation Programs (NAEYC, 2009). These position statements promote: (a) the development of reciprocal and collaborative relations between teachers and families, (b) active parent participation in decision making process, (c) teachers' responsiveness to diverse family needs and interest, and (d) ongoing communication between teachers and parents (Mandell & Murray, 2009; Sewell, 2012). According to NAEYC, early childhood educators need to ensure meaningful, relevant, and respectful learning experiences for each child and family. Moreover, teaching practice is not developmentally appropriate if the program limits parent participation or primarily focuses on parent education instead of parent involvement. According to NAEYC (NAEYC, 2009, p. 12):

> Students prepared in early childhood degree programs use this understanding to create respectful, reciprocal relationships that support and empower families and to involve all families in their children's development and learning.

Head Start Program

Head Start and Early Head Start are federal-to-local grant programs that have long placed on the role of families in program quality and success. According to Head Start, family engagement and parental involvement are critical elements of high-quality early childhood care and education. Parental involvement has been mandated by the Head Start infrastructure since Head Start's establishment in 1964. Head Start programs must adhere to a set of performance standards regarding their services. The key components of the Head Start program Performance Standards require programs to have an open-door policy to parents at any time during operation, to involve parents in the development of program curricula, and to provide parents opportunities to volunteer or become staff.

Parent involvement in Head Start is related to children's developmental outcomes. Children with more involved parents earned higher scores on emergent literacy and math tasks, and expressed more positive social behavior than children whose parents were less involved (FACES, 2006). A more recent study, released by the National Bureau of Economic Research (NBER), investigated the relationship between family activities and children's development. The results indicated that families in Head Start programs increased their home activities to support child development and children demonstrated higher skills (Gelber & Isen, 2011). Overall, these results imply that opportunities for active parent involvement lead to child development.

Head Start programs encourage parents and families to become involved in their children's education, both in and out of the classroom. Head Start programs acknowledge that parents and families are most often the strongest supporters of their children. By law, Head Start programs must help parents and families support their children as they enter

Early Head Start or Head Start, and as they transition from Head Start to kindergarten, another preschool program, or a child care setting. Moreover, Early Head Start has published two main technical assistance papers related to family-centered practices: (1) *Linguistic Diversity and Early Literacy: Serving Culturally Diverse Families in Early Head Start* (Head Start National Resource Center, 2000), and (2) *Family, Friend and Neighbor Care in Early Head Start: Strengthening Relationships and Enhancing Quality* (U.S. Department of Health and Human Services Administration for Children and Families Administration on Children, Youth and Families Head Start Bureau, 2006).

Promoting family-centered practices is a primary goal for EI/ECSE teacher training programs and professional organizations. Although family-centered practice has been articulated across training programs and organizations, EI/ECSE teachers may partially provide family-centered services due to variations in their training and lack of quality measures available to assess family-centered practices (Fults & Harry, 2011; Murray & Mandell, 2006; Pretti-Frontzcak, et al., 2002). Because of these limitations, teachers may not evaluate the quality and intensity of their practices. To better understand implementation of family-centered practices, it is important to look at the tools that aim to assess family-centered practices.

Measures of Family-Centered Practices

Four of the most commonly used measures that focus on family-centered practices are the focus of this review: DEC Parent Checklist, Family-Centered Practice Checklist, Family-Professional Partnership Scale (Professional Version), and Father Friendly Check-Up (See Table 1). These measures were developed to assess the degree of family-centered practices in early childhood education (ECE) and EI/ECSE programs and

can be administered by parents, program directors, and teachers. Users of all four measures can have online access at no cost and reproduce the measures for practice purposes, and results can be used to gain an overview of family-centered practices at the classroom level and monitor service providers' initiatives toward family-centered practices. Psychometric properties of these measures are summarized in Table 2 and each is discussed below.

Table 1. A short list of sample items.

Measure	Sample Item
DEC Parent Checklist (Hemmeter & Salcedo, 2000)	1. My child's program provides me with a primary contact person and easy ways to contact that person. 2. Program policies promote the provision of my child's services in our everyday settings and routines.
Family-Centered Practices Checklist (Wilson & Dunst, 2005)	1. Treat the family in a warm, caring, and empathic manner. 2. Support and respect family members' decisions.
Family-Professional Partnership Scale-Professional Version (Summers, Hoffman, Marquis, Turnbull, et al., 2005)	1. Help (*name of the parent*) gain skills or information to get what his/her child needs. 2. Protect (*name of the parent*)'s privacy.
Father Friendly Check-Up™ (NFI, 2000, 2006, & 2010)	1. Include a clear expectation that fathers should and will participate in the activities and programs of my organization. 2. Includes space for fathers and children to interact together when waiting for service or assistance or when children of father employees visit.

DEC Parent Checklist

DEC Parent Checklist was designed for parents to evaluate programs for their young child with special needs (Hemmeter & Salcedo, 2000). The checklist was founded on *DEC Recommended Practices in Early Intervention/Early Childhood Special*

Education (Sandall, McLean, & Smith, 2000) and *DEC Recommended Practices: A Comprehensive Guide for Practical Application in Early Intervention/Early Childhood Special Education* (Sandall, et al., 2005). The term *service provider* was used in the checklist to refer to professionals who work with young children and their families such as early interventionists, childcare providers, preschool teachers, and home visitors.

The checklist intended to provide parents with a general overview of a program by emphasizing family-centered practices. The checklist contains 36 items and is divided into five areas: (1) How does the program determine the strengths and needs of my child and family? (2) How do service providers work together with me to meet the needs of my child? (3) How do my child's different environments support his/her learning? (4) How do service providers in my child's environments support my child's learning? and (5) What are the policies of the program, and how are they communicated to families?

Users can have online access to the checklist through DEC's web site. Administration time takes approximately 25 to 35 minutes and items appear to be written in a clear and jargon-free language. In addition to a lack of information on item scoring, the checklist has not been tested for reliability and validity. For these reasons, it might not be appropriate for research purposes. Moreover, the checklist was developed to be used by parents, not service providers. This difference may limit its' use as a measurement tool beyond parents' individual perceptions of their programs. For instance, completing the checklist may not guarantee better implementation of family-centered practices, unless parents discuss their results with their service provider or program director.

Family-Centered Practices Checklist

Family-Centered Practices Checklist was developed to assess degree of implementation of family-centered practices (Wilson & Dunst, 2005). The items were developed through comprehensive literature review and feedback processes and has 17 items organized into two types of practices: *relational* and *participatory* and two clusters of each type of practice and takes approximately 10 to 15 minutes to administer. Relational *helpgiving* practices include behaviors that a practitioner uses to build rapport with parents and families, whereas participatory *helpgiving* practices include behaviors that a practitioner uses to assist families to make choices and take action to achieve desired outcomes (Wilson & Dunst, 2005). The checklist can be used for promoting family-centered practices, supporting practitioners to improve their relationships with families, and to monitor service providers' use of family-centered practices.

Each item is rated using the following scale: (a) 1 = "*yes, practice was used*", (b) 2 = "*practice was partially, sometimes used*", (c) 3 = "*practice not used, opportunity missed*", and (d) 4 = "*NA, no opportunity to observe*." In addition to the scoring option, users can write an example, comment and/or reflection for each item in a designated space. Users can have online access through the Center for the Advanced Study of Excellence's web site and produce for practice purposes.

Although the researchers provided a thorough summary of their steps about the item development process, there are several notable limitations. The checklist has not been tested for reliability and validity. In addition to the lack of reliability and validity data, the authors did not report background information of the co-workers and practitioners who were asked to provide feedback on the items (e.g., sample size,

experience in EI/ECSE, educational background, primary role in the field, etc.). Thus, the checklist is lacking necessary evidence for a valid and reliable tool.

Family-Professional Partnership Scale (Professional Version)

Family-Professional Partnership Scale-Professional Version was developed by the Beach Center on Disability at the University of Kansas in partnership with families, service providers, and researchers (Summers, Hoffman, Marquis, Turnbull, et al., 2005). The scale measures the extent of service providers' satisfaction with their partnership-oriented practices with the families with whom they work. The scale may be used as an evaluation tool to measure program satisfaction or a self-improvement tool for service providers.

The scale has two domains, child-focused and family-focused. Each domain contains nine items with a five-point Likert-type response scale, where "1 = *very dissatisfied*, 3 = *neither satisfied nor dissatisfied*, and 5 = *very satisfied*." Each item begins with the phrase, "*how satisfied are you with the way that you…"* and continues with a question (See Table 1). Service providers are asked to fill out the scale for each parent. Users can have online access to the checklist through the Beach Center on Disability's web site. The administration time takes approximately 10 to 15 minutes.

Three indices were used to evaluate the quality of fit in the confirmatory factor analysis models: the chi-square, the Comparative Fit Index, and the Root Mean Square Error of Approximation (RMSEA) for the Family-Professional Partnership Scale (Summers, Hoffman, Marquis, Turnbull, et al., 2005). For importance ratings, the fit statistics for the Child-Focused factor were χ^2 (27) – 81, $p < .001$, CFI = .89, RMSEA = 11. For the Family-Focused factor, the fit were χ^2 (27) = 47, $p < .001$, CFI = .95, RMSEA = .07. The overall fit for the 18-item 2-factor model for importance ratings was

χ^2 (134) = 221, p < .001, CFI = .91, RMSEA = .06. For satisfaction ratings, the fit statistics for the Child-Focused factor was χ^2 (27) = 47, p < .001, CFI = .97, RMSEA = .07. For the Family-Focused factor, the fit was χ^2 (27) = 61, p < .001, CFI = .94, RMSEA = .09. The 2-factor satisfaction model fit statistics were χ^2 (134) = 270, p < .001, CFI = .90, RMSEA = .08 (Summers, et al., 2005). Chronbach's alpha for satisfaction ratings on the 18-item Scale was 0.96; for the nine Child-Focused items it was 0.94, and for the nine Family-Focused items it was 0.92.

An important concern of the Family-Professional Partnership Scale is representativeness of the sample population. The participants were less socioeconomically, culturally, and linguistically diverse, thus potentially reducing the generalizability of the results with diverse populations (Summers, et al., 2005). Although the scale has been used in several studies and tested in the field, no information on validity studies is provided. These essential missing pieces may limit the usefulness of the tool in the EI/ECSE field.

Father Friendly Check-Up™

National Fatherhood Initiative (NFI) published the most recent version of the Father Friendly Check-Up in 2010 (NFI, 2012). The measure aims to assess the degree to which an organization's initiatives encourage father involvement in the delivery of services. It has been used in several organizations and programs across the US including Early Head Start, Head Start, Parents as Teachers, and Circle of Parents to build a foundation for a fatherhood service, improve staff members' skills to work with fathers, and examine the program structure with an emphasis on father-friendly practices. The four domains of the checklist are: (1) leadership development, (2) organizational

development, (3) program development, and (4) community engagement. Users rate items on a five-point Likert-type scale ranging from "*strongly agree*" to "*strongly disagree*" with "*neutral*" in the middle.

Users can have online access to the measure through the National Fatherhood Initiative's web site and the tool can be completed with a quick sign-in procedure. Administration takes approximately 100 to 120 minutes. The tool provides information on scoring and administration. The scoring system provides a total score for each category and identifies the areas that are most in need of improvement. At the end of the check-up, users receive several recommendations to help them more successfully engage and educate fathers.

The Father Friendly Check-Up provides a unique purpose by emphasizing the importance of father involvement in the field of early childhood education. The Father Friendly Check-Up promises that practitioners will have a good idea of how to build a foundation for father involvement in a new or existing program. Unfortunately, the Father Friendly Check-Up does not provide any psychometric properties, thus reducing its usefulness as a research tool in the field. Moreover, the Father Friendly Check-Up has 111 items total, which can be frustrating to respond to all items, thus reducing the likelihood of re-taking the Father Friendly Check-Up for program evaluation purposes.

Conclusion

There are several well-known measures to assess family-centered practices in the EI/ECSE field that have the potential to improve relationships between service providers and parents. They can be used to identify specific standards for expected family-centered practices, monitor service providers' use of family-centered practices in a program, and

evaluate program quality based on implementation of family-centered practices. Users can have access to the aforementioned measures with no cost. The availability of well-designed measures to assess family-centered practices is an important step to improve the quality of services.

Table 2. Summary of the measures.

Measure	Scoring	Number of Items	Psychometric Properties	Administration Method
DEC Parent Checklist (Hemmeter & Salcedo, 2000)	Not available	36	Not reported	Paper-pencil only
Family-Centered Practices Checklist (Wilson & Dunst, 2005)	Four-point Likert scale	17	Not reported	Paper-pencil only
Family-Professional Partnership Scale-Professional Version (Summers, Hoffman, Marquis, Turnbull, et al., 2005)	Five-point Likert scale	18	Available	Paper-pencil only
Father Friendly Check-Up™ (2010)	Five-point Likert scale	111	Not reported	Online, can be printed as well

With regard to the focus of assessment of family-centered practices, very few studies provided solid evidence of psychometric properties of the measures (Summers, et al., 2005). Moreover, studies provided limited information about the development and selection of the items (Hemmeter & Salcedo, 2000; Summers, et al., 2005; Wilson & Dunst, 2005). No studies reported data on the utility of the tools. Additionally, there is a noteworthy variation regarding the number of items across tools. For instance, the Family-Centered Practices Checklist (Wilson & Dunst, 2005) has 17 items, whereas the

Father Friendly Check-Up (NFI, 2010) has 111 items. It should be noted that the time needed to complete the tool might affect the utility of the tool for service providers with varying caseloads, education, and experience. The evidence is clear that there is a need for a brief, valid, and efficient measure that assesses service providers' family-centered practices in a timely manner.

Parent and service provider satisfaction has been the focus of published measures to date, rather than assessing family-centered practices based on direct observations (NFI, 2010; Summers, et al., 2005). An emerging concern about this approach is that it might be missing the true value of family-centered practices experienced by parents. For instance, a parent may experience low-quality family-centered services, but may not be fully informed about best practices on family-centered services. Items on a measure may unintentionally guide the parent to think that the services he/she receives are the best possible options. For these reasons, the measures might not truly evaluate family-centered practices, and results may be difficult to interpret. Therefore, parent satisfaction regarding family-centered practice and service provider implementation of family-centered practice should be measured independently.

Furthermore, while these tools measure family-centered practices, many of the items tend to assess general provisions more than specific practices (Summers, et al., 2005; Wilson & Dunst, 2005). For instance, several items on the Beach Center Family-Professional Partnership Scale seem to broadly assess satisfaction of service providers' relationships with families (e.g., "How satisfied are you with the way that you… are a person on whom (name of the parent) can depend and trust" and "How satisfied are you with the way that you… are friendly to (name of the parent."). From that perspective,

items tend to assess general provisions may not be good discriminators of family-centered practice. Therefore, an efficient, comprehensive tool is needed that will identify observable family-centered practices, and better assist service providers in implementing family-centered service.

Importance of assessing family-centered practices. Assessing family-centered practices may strengthen parent-child interactions, improve service providers' relationships with families, and increase program quality. The model for developing a tool to measure the quality of family-centered practice is shown in Figure 1. Theory, research in ECE and EI/ECSE, and professional standards in the field affect tool development. Assessment of family-centered practice is hypothesized to directly affect parent-child interaction, parent-service provider relationships, and program quality. Parent, service provider and program outcomes are expected to vary depending on the quality of family-centered services. Overall, implementing family-centered practices may lead to improved outcomes for parents, service providers, and programs.

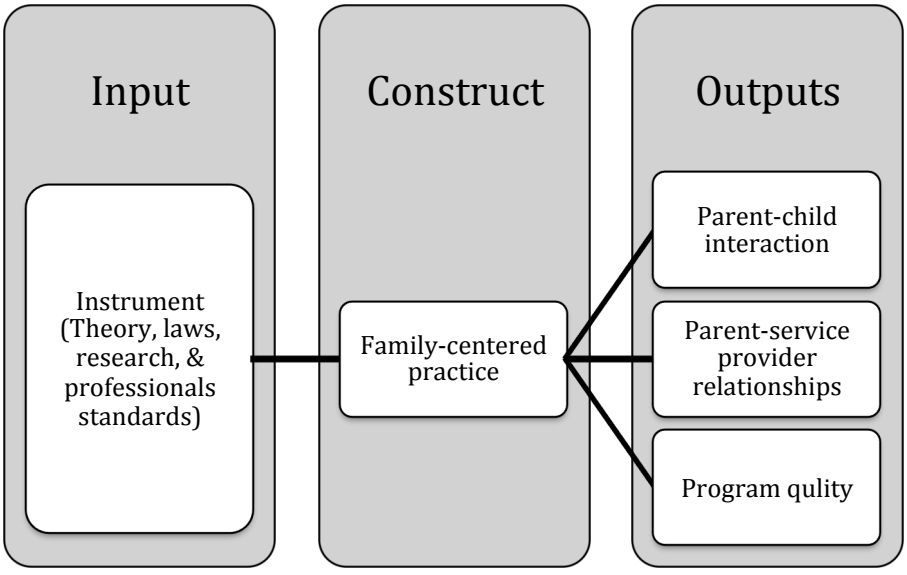

Figure 1. Model to assess family-centered practices.

Purpose of Study

The purpose of this research was to (1) develop items for a new instrument Family-Centered Practices Profile, (2) describe the validation process, and (3) explore the results of a field test. In response to a lack of validated instruments designed specifically to assess family-centered practices in EI/ECSE programs, a new measure the Family-Centered Practices Profile was designed and validated. The Family-Centered Practices Profile is a structured self-rating scale designed to assess the quality of provisions and daily classroom practices that support family-centered practices in (EI/ECSE) programs. The profile was specifically developed to evaluate a service provider's ability to provide family-centered practices in EI/ECSE. The profile may improve program and personnel evaluations, identify specific skill for personnel development, and function as a research tool to explore relationship dynamics between service providers and parents. The present study built on a recognized premise of what constitutes family-centered practice in EI/ECSE (Dunst, Boyd, Trivette, & Hamby, 2002; Dunst, Trivette, & Hamby, 2007; Epley, Summers & Turnbull, 2011).

A five-step process was employed: (1) exploratory research, (2) conceptualization, (3) item generation, (4) expert review with two independent groups, and (5) field test (Goodwin & Leech 2003; Pedhazur & Schmelkin, 1991). The study addressed the following research questions:

1. What is the content validity of the Family-Centered Practices Profile?
    a. What are parents' ratings of content validity with aspects of Family-Centered Practices Profile?

b. What are professionals' ratings of content validity with aspects of the Family-Centered Practices Profile?

2. What are the constructs underlying the family-centered practices questions?
3. What is the internal consistency reliability of each construct?
4. What is the utility of the Family-Centered Practices Profile for service providers?

Human Subjects

This study required the participation of human respondents including parents, professionals, and EI/ECSE service providers. The University of Oregon's Institutional Review Board (IRB) approved the study proposal, which included procedures, measures, consent forms, and recruitment materials. In order to establish and maintain confidentiality of the participants, the researcher (1) had sole access to data; (2) used numbers instead of names to identify participants at each step; (3) transformed paper-pencil data into online form and destroyed the paper-pencil versions; (4) launched an online, anonymous survey with no identifying information linked to answers; and (5) eliminated the online data from the Qualtrics 15 days after the survey link was closed to participant access.

CHAPTER III

METHODS

Participants, measures, and procedures for recruitment and data collection are described in this section. This study explored the conceptualization, development, and validity of a new instrument, the Family-Centered Practices Profile. Results of the field test were used to gain an overview of the underlying structure of the profile and provide utility of the profile for service providers.

Participants

Three groups of participants were recruited: (a) parents, (b) professionals, and (c) EI/ECSE service providers. A quota sampling method was used for parents and professionals; inclusion criteria of participants are described below. A convenience sampling method was used for EI/ECSE service providers.

Parents and professionals were recruited for expert group purposes; each group was composed of 10 members with the Content Validity Ratio (CVR) value set to .62 (α < .025, one-tailed) (Wilson, Pan, & Schumsky, 2012). The first reason for selecting a particular number of participants was to measure the content validity of the profile with a high CVR (i.e., if the number of participants is increased to 20, a minimum CVR of .43 will be required, or if it is increased to 30, a minimum CVR of .35 will be required) (α < .025, one-tailed) (Wilson, Pan, & Schumsky, 2012). A second reason was to analyze the obtained scores using rigorous statistics, and third one was to make a better attempt to interpret results.

EI/ECSE service providers were recruited for field test purposes. In this research study, with a margin of error at 5%, confidence level at 95%, and the response

distribution at 50%, the sample size was calculated at 377 participants (Barlett, Kotrlik, & Higgins, 2001). The sample included a total of 354 participants.

Parents

Parents with young children with special needs or were at risk of developmental delays were also recruited to this study (Parent and caregiver terms will be used interchangeably to describe these participants). A parent was defined as a mother, father, grandparent, or a legal guardian. Only one parent from each family was invited to participate. Parent group inclusion criteria were: (a) at least of 18 years old, (b) able to speak and read English, and (c) willing to provide written informed consent prior to study entry. Exclusion criteria were (a) having any concurrent medical condition that precluded participation, and (b) participation in a similar study at the same time. Participants were chosen through quota sampling, and a total of 10 parents were recruited from a Northwestern state (Vockell & Asher, 1995).

Professionals

For the purpose of this study, a professional was defined as a person who was qualified in a subject matter by knowledge, specialty, years of professional experience in the present area of specialization, and education level. The initial protocol called for surveying a group of 10 participants. Fifteen professionals were invited individually via electronic mail across the United States. Ultimately 10 of them were enrolled. Professional group inclusion criteria were: (a) a minimum of five years of experience on family studies, (b) experience working with families who have children with special needs, (c) knowledgeable about family-centered practices, and (d) knowledgeable about questionnaire design, disability policy, and EI/ECSE.

EI/ECSE Service Providers

A service provider was defined as a specialist who was providing services, education, and support to young children with special needs and/or who are at-risk of developing a delay and their families. Service provider inclusion criteria were that providers (a) have provided services for young children birth-to-five with disabilities and/or at risk of developmental delays and their families for at least one year and (b) are expected to be employed during the data collection procedure. Overall, 354 EI/ECSE service providers participated from five northwestern states.

Measures

Five measures were used: (1) Family-Centered Practices Profile, (2) demographic information forms, (3) content validity survey - parent version, (4) content validity survey - professional version, and (5) utility survey. Table 3 outlines the instruments completed by participants, and each measure is described below.

Table 3. Study outcome measures.

Participants	Measure	Format
Parents	1. Demographic information form 2. Content validity survey - parent version	Paper-pencil
Professionals	1. Demographic information form 2. Content validity survey - professional version	Online
EI/ECSE Service provides	1. Demographic information form 2. Family-Centered Practices Profile 3. Utility survey	Online

Family-Centered Practices Profile

To develop a measure to assess EI/ECSE service providers' implementation of family-centered practices, a five-step process was taken as shown in Table 4: (1) exploratory research, (2) conceptualization, (3) item generation, (4) expert review with two independent groups, and (5) field test (Goodwin & Leech 2003; Pedhazur & Schmelkin, 1991).

Table 4. A summary of five-step process.

Steps	Tasks
1. Exploratory research	• EI/ECSE literature review, including position statements and program standards of DEC, NAEYC, and Head Start programs • 80 nonparticipant formal observations
2. Conceptualization	• Synthesis of exploratory research • Identification of possible concepts for domains
3. Item generation	• Emergent item generation • Revision of the items
4. Expert review with two independent groups	• Validation of the profile's initial version • Pilot test
5. Field test	• Exploration of constructs underlying the family-centered practices questions • Assessment of internal consistency reliability of each construct • Exploration of the utility of the Family-Centered Practices Profile for service providers

First, a comprehensive review was undertaken to examine policies about family involvement during early childhood years, evidence-based practices to support family-centered practices, and measures used to assess family-centered practices in EI/ECSE. Additionally, position statements and program standards of DEC, NAEYC, and Head Start programs about family-centered practices were reviewed. In addition to the

literature review, approximately 80 nonparticipant (e.g., observed without interacting) formal observations were conducted over a period of two years in a Northwestern state. Each one lasted one hour and occurred in community-based Part C EI programs, inclusive early childhood education classrooms, reverse mainstream preschools, and on home visits. Formal field observation notes regarding family-centered practices were discussed and reviewed with practicum students, EI/ECSE service providers, and supervisors.

Second, the synthesis of exploratory research including a literature review and observations guided the conceptualization of the following values to undergird the profile: (1) parents most often know their children best, (2) families are different and unique, (3) optimal child functioning occurs within a supportive family and community context, (4) each family should have the opportunity to decide the level of involvement they prefer in decision making for their child, (5) each family and family member should be treated with respect and dignity, (6) the needs of all family members should be considered to individualize the services, and (7) the involvement of all family members should be supported and encouraged. The information was summarized to create concepts. Following the conceptualization process, family-centered practices were identified and categorized into five domains: (1) communication, (2) program, (3) environment, (4) service delivery, and (5) parent support.

Third, items were created for each area by following an emergent item generation approach. For instance, to create items for the communication area, the researcher first considered observed communication methods in an EI/ECSE program, as well as service provider communication skills. To inform parents about daily program schedules, service

providers seemed to use multiple methods such as providing a paper copy for each parent, electronic mail for parents who prefer online communication, and bulletin boards for all parents and visitors in the program. Furthermore, service providers appeared to be flexible with their timing and they preferred to use translated materials while sharing information with parents, who were non-native English speakers. As a result, an item such as, "there is a weekly program newsletter available in several formats (e.g., print, online) and in the major languages of families" was developed.

Data collected from literature review and observations guided the item development process and a pool of items was created. Overall, the initial version of the profile consisted of 68 items, and five domains: communication, program, environment, service delivery, and parent support. Two independent expert groups, parents and professionals validated the initial version of the profile. Before the field test, a pilot test was conducted. The pilot scale was administered to eight individuals (researchers who had doctoral degree in EI/ECSE) in order to obtain feedback on the competency clarity, and the quality of the items. In addition to content of the profile, feedback was obtained about the procedural segment of the profile including the time to complete the profile and the adequacy of online format. The expert reviews and field-test process, which were the last two steps in developing the profile, were the main focus of this study (Goodwin & Leech 2003; Pedhazur & Schmelkin, 1991).

Demographic Information Forms

Three demographic information forms were developed one for each group of participants. Parents completed a demographic information form that included questions regarding age, gender, marital status, ethnicity, and family income level. Information

about their children included child's age, gender, disability status, and years in EI programs were also collected. Similarly, professionals were invited to complete a demographic form that included questions regarding age, gender, level of education, number of years in the field, and research interests. Lastly, early interventionists were asked to respond demographic questions such as age, gender, level of education, years of experience, and primary role in providing EI/ECSE services.

Content Validity Survey - Parent Version

According to the Standards for Educational and Psychological Tests, test developers must demonstrate content validity (American Psychological Association, 1999). Haynes, Richard, and Kubany (1995) define content validity as the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose.

Parents were invited as experts to complete a content validity survey. First, parents were asked to rate initial 68 items based on representativeness, consistency, and essentiality on a three-point Likert-type scale. In addition, each item included the possibility of proposing alternative wording. The first part of the content validity survey included 68 items. At the end of the survey there was a space for open-ended comments where parents could make suggestions for additions, deletions, or modifications to the items.

Content Validity Survey - Professional Version

Based on parents' ratings of the profile's initial version, a second set of items was generated. Professionals were invited as experts to rate this second set of items for content validity, on representativeness, consistency, and essentiality using a 3-point

Likert-type scale. Overall, professionals rated 37 items. Similar to the parent version of the content validity survey, each item included the possibility of proposing alternative wording. At the end of the survey, professionals were asked to provide feedback on the response option of the profile, and a space was provided for further suggestions and improvements.

Utility Survey

EI/ECSE service providers were invited to complete a seven-question utility survey about the importance of the questions in the profile, ease of use, usefulness in their work, and whether or not they would use the profile in the future. A 4-point Liker-type scale (1 = "*strongly disagree*", 2 = "*disagree*", 3 = "*agree*", and 4 = "*strongly agree*"), and an open-ended question were included to solicit feedback.

Gathering utility data for this study was an important practice for several reasons: (a) ethical responsibility to professionals and parents, (b) guidance for professionals in helping them to improve family-centered practices, and (c) providing a rationale for making needed revisions to the Family-Centered Practices Profile.

Recruitment and Data Collection Procedures

Recruitment procedures for parents, professionals, and EI/ECSE service providers are described below. Descriptions of the data collection procedures for each group of participants are also explained.

Recruitment

To recruit parents, flyers were posted on family communication bulletin boards at EI/ECSE programs in a Northwestern state. Flyers were available at times when parents visit EI/ECSE programs such as morning arrival and departure times. An effort was made

to include agencies that serve children and families living in poverty, and/or with culturally-linguistically diverse backgrounds. Parents who were interested in the study contacted the researcher via phone or email.

To recruit professionals, the researcher contacted potential participants via email, describing the research study, and inviting them to participate. Lastly, in order to recruit EI/ECSE service providers, an electronic invitation mail was sent to the community-based Part C EI contractors, EI/ECSE program directors, Head Start programs, and their list serves in Oregon, Washington, Montana, Idaho, and Wyoming. In addition, state and local chapters of professional organizations, such as NAEYC and DEC were informed about the study via electronic flyers. Introduction of the research study and recruitment efforts were started three months before the data collection process in order to reach a large amount of participants.

Data Collection Procedures

After an initial contact, parents received a packet including: (a) consent form, (b) demographic information form, (c) content validity survey - parent version, and (d) self-addressed envelope (SAE) (if necessary). The surveys were color coded and sent with a cover letter explaining the purpose of the study and a consent form. Only one parent from each family was invited to participate, and parents were not introduced to each other. These procedures were chosen to avoid contamination and bias. Participants completed all forms in the conventional paper-pencil method. After parents completed the surveys, they mailed their packets or contacted the researcher to deliver the packets in person. The parents were asked not to put any identifying information (i.e., names or addresses) on the returned surveys or on the envelope to ensure anonymity. Parents were compensated

with a $50.00 gift card for their participation. Data from parents were collected within a three-week time period.

The study protocols and consent forms were made available online for professionals. Professionals who agreed to participate completed an online anonymous survey that included: (a) demographic information form, and (b) content validity survey - professional version. Electronic reminders were sent out to increase responses. Professionals were compensated $50.00 gift card for their participation. Data from professionals were collected within a three-week time period.

A similar online protocol was created for EI/ECSE service providers. Service providers who agreed to participate followed computer prompts to complete the following measures: (a) demographic information form (b) Family-Centered Practices Profile, and (c) utility survey. At the end of the survey, service providers were invited to enter a raffle and 14 randomly selected participants received $50 Amazon gift cards. Data from service providers were collected within a two-month time period.

Data Analysis

Data analysis methods were selected according to the research questions. Research questions, outcome measures, and data analysis procedures can be found in Table 5. Statistical analyses were conducted using the Statistical Package for Social Sciences (SPSS), version 21.0. The significance alpha level for content validity analyses was a .025, and for principal axis factor analysis with varimax (orthogonal) rotation was a .05.

Prior to starting the analysis, each data set was examined for incompleteness. Content validity data sets did not contain any missing or incomplete data. Electronic

entries of the quantitative data were proofread. As anticipated, field test data set contained missing data. Overall, 377 participants took the Family-Centered Practices Profile, yet only 354 participants completed the profile, 6% of the participants did not complete the profile. In addition to the amount of missing data, the pattern of missing data was evaluated to identify whether there were consistent omissions. It appeared that there were no patterns in the missing data and the missing values were not related to any variables under study. In summary, the missing data were completely at random. The missing data were treated by a traditional listwise deletion method where the cases with any missing values were deleted from the analysis.

Table 5. Research questions, outcome measures, and data analysis.

Research Questions	Outcome Measure	Data Analysis
1. What is the content validity of the Family-Centered Practices Profile?		
a. What are parents' ratings of content validity with aspects of Family-Centered Practices Profile?	Content validity survey-parent version	CVR
b. What are professionals' ratings of content validity with aspects of the Family-Centered Practices Profile?	Content validity survey-professional version	CVR and CVI
2. What are the constructs underlying the family-centered practices questions?	Family-Centered Practices Profile	Principal axis factor analysis with varimax rotation
3. What is the internal consistency of each construct?	Family-Centered Practices Profile	Cronbach's coefficient alpha
4. What is the utility of the Family-Centered Practices Profile for service providers?	Utility survey	Frequencies

Note. CVR = Content validity ratio, CVI = Content validity index.

In the development of the Family-Centered Practices Profile, it was essential to address content validity of the instrument. Two content validity analyses were conducted to refine the profile and reduce the number of items. Two independent expert groups consisting of parents and professionals participated; each expert group was composed of 10 members. Therefore, a minimum CVR of .62 was required ($\alpha < .025$, one-tailed) (Wilson, Pan, and Schumsky, 2012). Because the profile was intended for the profile to be used as a research tool and to assess quality of the family-centered practices, items that received relatively low ratings were removed. According to Lawshe (1975), CVR value was a linear transformation of the ratio of the number of experts judging an item. Specifically,

$$\text{CVR} = \frac{n_e - (N/2)}{N/2}$$

here n_e was the number of experts indicating that the item was "*essential*," and *N* was the total number of experts in the group. When all experts rated the item as "*essential*," the value of CVR was computed to be 1; when the number rating the item as "*essential*" was more than half but less than all, the value of CVR was between 0 and 1; when less than half of the experts rated the item as "*essential*," the value of CVR was negative; a zero value meant that half the panel rated it as essential and the other half did not (Lawshe, 1975). After items had been identified for inclusion in the final form, the content validity index (CVI) was computed for the whole profile. According to Lawshe (1975), CVI is the mean of the CVR values of the retained items.

A principal axis factor analysis with varimax (orthogonal) rotation was used to assess the underlying structure for the items of the Family-Centered Practices Profile with

data gathered from EI/ECSE service providers. Next, Cronbach's coefficient alpha was computed using SPSS reliability analysis to assess the internal consistency of the profile. Demographic information for each group of participants and utility survey data were analyzed using descriptive statistics and frequencies.

Open-ended questions were included at the end of the surveys to identify additional items and comments that could be not included. Major themes were identified in responses as reoccurring meaning patterns or areas of interest. The colleague debriefing method (comparing themes and categories identified by a colleague) was used to establish credibility of the qualitative findings. The researcher discussed identified themes and related items with the dissertation chair.

CHAPTER IV

RESULTS

The purpose of this study was to develop and validate a new measure, the Family-Centered Practices Profile, to assess the quality of practices that support family-centered approach in the EI/ECSE programs. Qualitative and quantitative data were collected to answer the following research questions.

1. What is the content validity of the Family-Centered Practices Profile?
    a. What are parents' ratings of content validity with aspects of Family-Centered Practices Profile?
    b. What are professionals' ratings of content validity with aspects of the Family-Centered Practices Profile?
2. What are the constructs underlying the family-centered practices questions?
3. What is the internal consistency of each construct?
4. What is the utility of the Family-Centered Practices Profile for service providers?

Content Validity

Content validity analyses for parent and professional groups are described in this section. The results are organized into two parts: demographic information of the participants and content validity study.

Parent Ratings

A total of 10 parents completed content validity surveys, 8 mothers and 2 fathers. Parents identified themselves as Caucasian (n = 7), Hispanic/Latino (n = 2), and Native American (n = 1). Parents defined their relationship status as married (n = 6), living with

a partner but not married (*n* = 3), and single (*n* = 1). A majority was in the 30- to 39-year age group (*n* = 7); 2 parents were in the 20- to 29-year age category, and one parent was in the 40- to 49-year group. Eight parents reported their major language English, whereas two of them reported Spanish-English. Parents' education level and annual household income information are summarized in Table 6.

Table 6. Parents' level of education and annual household income.

Variable	*N*
Level of education	
High school	1
Some college	4
Two-year college degree	2
Four-year college degree	1
Masters	2
Annual household income	
$0-12,000	2
$12-24,000	2
$24-40,000	1
$40-60,000	3
$60-and above	2

With regard to their children, 7 were boys and 3 were girls. The reported disability and at-risk of developmental delay conditions included autism spectrum disorder (*n* = 4), speech and communication delay (*n* = 3), blindness (*n* = 1),

developmental delay (n = 1), and Down syndrome (n = 1). Demographic characteristics of parents are summarized in Table 7.

Table 7. Children's demographic characteristics.

Variable	*n*
Age	
2-3 years old	4
4-5 years old	6
Duration in early intervention program	
Less than a year	3
More than a year	7

The initial version of the Family-Centered Practices Profile contained 68 items and 5 domains: *Parent Support* (16 items)*, Communication* (15 items), *Service Delivery* (15 items), *Program* (14 items), and *Environment* (8 items). Of the 68 items assessed, 31 were considered to have insufficient content validity (CVR < .62, α < .025). For instance, (1) “The program has a family-friendly answering machine message with easy to follow directions”, and (2) “A committee of family and staff members develops individually sensitive policies related to holidays and birthday celebrations” were deleted due to low CVR.

In the dimensions of the Family-Centered Practices Profile, 8 items focused on *Parent Support*, 8 items focused on *Environment,* 6 items focused on *Communication*, 5 items focused on *Service Delivery,* and 4 items focused on *Program* were eliminated. All the remaining items were deemed valid with CVRs ranging from 0.80 to 1.00 and were retained. For instance, (1) “Service providers avoid the use of jargon and technical terms.

If jargon cannot be avoided, they take the time to explain its meaning with examples" and (2) "Service providers inform parents about their rights". Based on the feedback received, minor revisions regarding the wording of the items were made. Overall, there was a 45.5% reduction in the number of items. In addition to item reduction, the environment domain was removed due to high number of item losses. A sample item that was deleted due to low CVR from the environment domain was "main lobby or entrance creates a first impression of *welcome*." For detailed information on all CVRs, see Appendix C.

Professional Ratings

A total of 10 professionals completed the requested surveys (9 women). Respondents identified themselves as Caucasian (n = 8), Hispanic/Latino (n = 1), and Asian (n = 1). Respondents defined their primary role as researcher (n = 3); faculty member (n = 3); other (e.g., administrator, EI/ECSE director, and special educator) (n = 3); and post-doctoral fellow (n =1). Respondents were from different states including Oregon (n =3); North Carolina (n = 2); Washington (n = 2); Florida (n =1); California (n = 1), and Kansas (n =1). Table 8 provides a summary of professionals' education level and years of experience in EI/ECSE. Regarding age, 4 participants were in the 60- and above group, 3were in the 50 and 59-year age group, 2 were in the 30- to 39-year age group, and only 1 participant was in the 20- to 29-year age group.

Table 8. Professionals' level of education and experience.

Variable	*N*
Level of education	
Master's	1
Doctor of philosophy	9
Years of experience	
1-5 years	1
6-10 years	1
16-20 years	1
21-25 years	1
26 years and more	6

Of the 37 items assessed, 13 were considered to have insufficient content validity (CVR < .62, α < .025). Consequently, 4 items focused on *Service Delivery,* 4 items focused on *Program*, 3 items focused on *Communication*, and 2 items focused on *Parent Support* were eliminated. Although three items received low CVRs, the researcher chose to keep those items, because they were recommended practice in the field of EI/ECSE. Analyses revealed that five out of 37 items had the highest CVRs. Table 9 provides samples of the lowest and highest CVRs items. All the remaining items were valid with CVRs ranging from 0.80 to 1.00 and were retained. The results of the 37-item content validity survey yielded a 35% reduction in items.

The initial profile included 68 items. The first content validity analysis yielded a 45.5% reduction and 31 items were deleted. The second content validity analysis yielded a 35% reduction and only 13 items were deleted, whereas three items with insufficient

CVRs were kept. In summary, there was a 64.7% of item reduction.

Table 9. Examples of results of the lowest and highest CVRs items.

Domain	Examples of Items	*CVR*	Action taken
Communication	Use person first language.	.00	Kept
Service delivery	Choose screening tools that involve parents.	.00	Kept
Parent support	Provide family-friendly education materials, for example magazines, DVDs, etc.	.00	Kept
Communication	Avoid using jargon, labels, and technical terms. If those cannot be avoided, I explain their meanings and provide examples.	1.00	Kept
Communication	Communicate screening and/or assessment results clearly.	1.00	Kept
Service delivery	Develop strategies with families on how their culture can be represented in the early intervention process.	1.00	Kept
Parent support	Provide families information about various local, state, and national level resources to address both child and family needs.	1.00	Kept
Program	Protect family privacy and confidentiality; for example, we do not share files with third parties without the family's written consent.	1.00	Kept

Note. CVR = Content validity ratio.

The CVI values for all of the domains are shown in Table 10. Parent support domain received the highest CVI, followed by communication, program, and service delivery, range between .66 to .83.

Table 10. CVI values of the domains.

Domain	*CVI*
Communication	.73
Service delivery	.66
Parent support	.83
Program	.70

Note. CVI = Content validity ratio.

Professionals were requested to provide feedback on the profile's response options. Ninety percent of the participants preferred a "frequency" type response option rather than an "agreement" type (N = 9). For the open-ended question, two participants provided additional comments. The first comment indicated that items were representative and relevant to the family-centered practice in EI/ECSE programs. The second comment pertained to including an item about siblings. To address this issue, an item from the initial item pool was included under *Service Delivery* domain (i.e., Include family members, for example siblings in the early intervention process, when feasible.).

On the basis of all the feedback received, the Family-Centered Practices Profile underwent a final revision, which was primarily aimed at providing observable and measureable discriminators of family-centered practices. To assess the readability of the items for the final version of the profile, two standard instruments were used; the Flesh Reading Ease and Flesch-Kincaid Grade Level with results 26.6 and 12^{th} grade respectively. In the Flesh Reading Ease test, higher scores indicate text that is easier to read; lower scores mean material that are more difficult to read. A score of 26.6 may indicate that items were best understood with university graduates.

Constructs

Participants

The sample included a total of 354 participants. Overall, 49% (*n* = 173) were female, 27% (*n* = 96) were male, and 24% (*n* = 85) did not report gender. Participants were recruited from Northwestern states: (a) 34.5% from Oregon (*n* = 122), (b) 24.6% from Washington (*n* = 87), (c) 10.5% from Montana (*n* = 37), (d) 16.7% from Idaho (*n* = 59), and (e) 13.8 %from Wyoming (*n* = 49). A majority of the participants identified themselves as Caucasian 39% (*n* = 138), followed by Hispanic or Latino 14.4% (*n* = 51), Pacific Islander 10.5% (*n* = 37), Native American 9.3% (*n* = 33), African American 8.5% (*n* = 30), Asian 7.3% (*n* = 26), and 11% (*n* = 39) did not report ethnicity. Among participants, a majority had master's degrees 26.3% (*n* = 93), followed by 4-year college degree 20.6% (*n* = 73), and other 11.3% (*n* = 40) including "4-year college degree plus some graduate level credits," "graduate degree in teaching and add-on certificate in early childhood special education," and "human services plus birth to 5 special education endorsement."

A majority of participants had 10 and more years of experience in EI/ECSE 33.6% (*n* = 119) and described their primary role as early interventionists 52% (*n* = 189) (Figure 2). Participants defined their workplace as rural 29.9% (*n* = 106), suburban 29.4% (*n* = 104), and urban 21.8% (*n* =77). Interestingly, 18.9% of the participants (*n* = 67) specified their workplace as other, including "mainly urban area with rural areas as well," "medium city with rural services," and "combination of urban, suburban, and rural areas." In addition to participants' workplace, data were gathered about participants' classroom environments. Fifty-eight percent of the participants stated that they provided

EI/ECSE services in child's home, followed by early intervention classroom and Head Start program, 55.40% and 52.30% respectively (Figure 3).

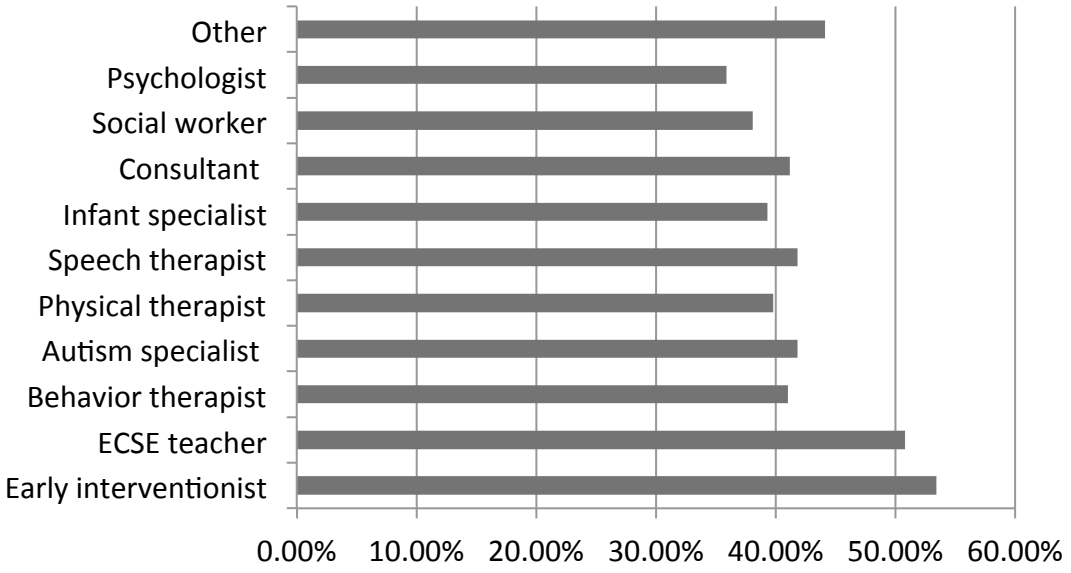

Figure 2. Overall percentages of participants' primary roles in the field.

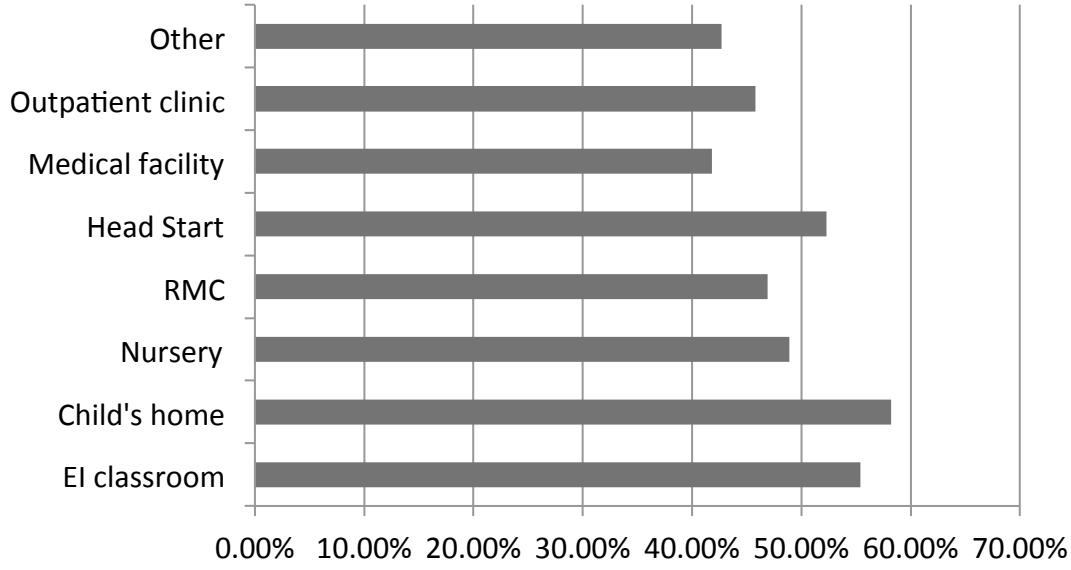

Figure 3. Overall percentages of participants' work placements.

Note. RMC = Reverse mainstream classroom, other = Community preschool classroom.

Thirty-five percent of the participants (n = 124) reported that they provide services to the children ages between zero and three, 32.2% of them reported that they work with children ages three to six years old (n = 114), and 32.8% of them reported that they work with both of the age groups (n = 116). Table 11 provides a summary of participants' education level and years of experience.

Table 11. Participants' education level and years of experience.

Variables	Frequency	Percent
Education level		
Less than high school	34	9.6%
High school diploma	27	7.6%
Some college credit	28	7.9%
2-year college degree	28	7.9%
4-year college degree (BA/BS)	73	20.6%
Master's degree	93	26.3%
Doctoral degree	13	8.8%
Other	40	11.3%
Years of experience		
1-3 years	88	24.9%
4-6 years	86	24.3%
7-9 years	61	17.2%
10 or more	119	33.6%

Analysis

A principal axis factor analysis with varimax (orthogonal) rotation was conducted to assess the underlying structure for the 24 items of the Family-Centered Practices

Profile on data gathered from 354 participants. An example item is "Ask parents to share their observations on their child's behaviors and daily activities." Responses were on a Likert-type scale, ranging from 1 = "*don't know/not applicable*", 2 = "*never*", 3 = "*rarely*", 4 = "*usually*", and 5 = "*every time*".

Initially, the factorability of the 24 items was examined. The determinant was greater than .0001. Here it was .011, suggesting reasonable factorability. If the determinant was zero, then a factor analytic solution could not be obtained. The Kaiser-Meyer Olkin (KMO) measure of sampling adequacy was .912 (KMO measure should be greater than .70 and is inadequate if less than .50). The KMO measure indicated whether enough items were predicted by each factor. The Bartlett's test of sphericity was significant, indicating that the variables were correlated highly enough to provide a reasonable basis for factor analysis (χ^2 (210) = 1558.82, $p < .01$).

In summary, the assumptions of variables being correlated were checked and met, further confirming that each item shared some common variance with other items. Given these overall indicators, the factor analysis was conducted with all 24 items. Four factors were requested, based on the fact that the items were designed to index four constructs: communication, service delivery, parent support, and program.

During several steps, a total of three items were eliminated because they did not contribute to a simple factor structure and failed to meet minimum criteria of having a primary factor loading of .40 or above and no cross-loadings of .30 or above. The eliminated items were (1) "Provide opportunities for family involvement in the decision-making process; for example, we have a parent advisory group or a parent focus group", (2) "Attend conferences, workshops, or webinars on family-centered practices", and (3)

"Exhibit positive images of families in photos and posters that vary in culture, family type, and ability."

A principal axis factor analysis of the remaining 21 items, using varimax (orthogonal) rotation was conducted, with the three factors explaining 28% of the variance. After rotation, the first factor accounted for 11.3% of the variance, the second factor accounted for 9.5%, and the third factor accounted for 7.8%. The factor loading matrix for this final solution is presented in Table 12, with loadings less than .40 omitted to improve clarity.

Overall, all of the items had positive loadings. The first factor, which seemed to index parent support, had strong loadings on the first five items. Eight items loaded onto factor 1. These items were related to supporting parents during EI/ECSE process. The second factor, which seemed to index communication, had strong loading on the first two items. Seven items were loaded onto the second factor related to communication between service providers and parents. The third factor, which seemed to index service delivery, had the highest loadings on the first two items. Six items that loaded onto the third factor related to the delivery of services from a family-centered approach. The lowest loading was on item 6, which was "Ask parents to share their observations on their child's behaviors and daily activities"; whereas the highest loading was on item 10, which was "Establish goals and objectives together with families for the Individual Family Service Plans (IFSPs) and/or Individualized Education Programs (IEPs)."

Item ratings showed good variability with scores falling from the lower to the higher end of the profile. The mean rating for most items fell in the midrange of the profile (between 3.30 and 4.00). Composite scores were created for each of the three

factors, based on the mean of the items. Higher scores indicated greater use of the family-centered practice. Communication was the family-centered factor that participants reported using the most, followed by parent support and service delivery factors. The skewness and kurtosis were well within a tolerable range for assuming a normal distribution and examination of the histograms suggested that the distributions appeared to be approximately normal. Descriptive statistics are presented in Table 13.

Table 12. Factor loadings for the rotated factors.

Item	Factor Loading			Communality
	1	2	3	
#18	.50			.29
#8	.49			.24
#9	.49			.36
#5	.42			.29
#6	.41			.36
#10		.55		.30
#1		.53		.26
#20		.48		.35
#3		.42		.25
#2			.51	.23
#12			.48	.25
#11			.44	.21
Eigenvalues	2.39	1.99	1.63	
% of variance	11.37	9.50	7.78	

Note. Factor loadings < .4 are suppressed.

Internal Consistency

Internal consistency of the domains was examined using Cronbach's alpha. Alphas are presented in Table 13 and ranged from .75 to .85, indicating that the Family-Centered Practices Profile has good reliability.

Table 13. Descriptive statistics for the three factors ($N = 354$).

Domain	Number of items	*M* (*SD*)	Kurtosis	Alpha
Communication	7	3.55 (.88)	-1.03	.85
Parent support	8	3.49 (.82)	-.84	.84
Service delivery	6	3.40 (.83)	-.75	.75

Overall, these analyses indicated that three distinct factors (communication, service delivery, and parent support) were underlying participants' responses to the Family-Centered Practices Profile items and that these factors were moderately internally consistent. Three out of 24 items were eliminated. Lastly, an approximately normal distribution was evident for the composite score data in the current study, thus the data were well suited for parametric statistical analyses.

Service Provider Utility

Answers from the utility survey were analyzed to assess the mean score for each question on data gathered from 350 participants. A 7-item utility survey was used. Responses were on a four-point Likert-type scale, ranging from 1 = "*strongly disagree*", 2 = "*disagree*", 3 = "*agree*", and 4 = "*strongly agree*." The following table details the means and standard deviations for each question. The overall means were high for all questions, ranging between 3.07 to 3.27.

Table 14. Service provider utility ratings.

Question	*M*	*SD*
The questions are important.	3.27	1.05
The questions are easy to understand.	3.22	1.10
The questions are useful in my work with families.	3.20	1.10
Family-Centered Practices Profile gives me further ideas about family-centered practices.	3.13	1.12
I am willing to change my routine to implement these practices.	3.16	1.10
Carrying out these practices will fit into my routine.	3.10	1.10
I plan to use the Family-Centered Practices Profile in the future.	3.07	1.10

Participants were asked to rate whether the questions were important. Over 60% (*n* = 214) of the participants replied, "*strongly agree,*" 16.4% (*n* = 58) agreed, and 10.5% (*n* = 37) disagreed. Whether items were easy to understand, 58.5% (*n* = 207) of the survey respondents replied, "*strongly agree,*" 16.7% (*n* = 59) agreed, and 10.5% (*n* = 37) disagreed.

Over 57% (*n* = 203) of the participants strongly agreed that the questions were useful in their work with families, and 11.3% (*n* = 40) of the participants disagreed. Similarly, 54.5% (*n* = 193) of the participants strongly agreed that the profile gave them further ideas about family-centered practices, whereas only 11.9% (*n* = 40) of them disagreed.

The next set of questions focused on service providers' implementation of family-centered practice in their daily routine. Over 55% (*n* = 195) of the participants strongly agreed that they were willing to change their routines to implement these practices, 17.8% (*n* = 63) agreed, and 13% (*n* = 40) disagreed. Additionally, 52.3% (*n* = 185) of the

participants strongly agreed that carrying out these practices would fit into their routines, 16.7% (n = 59) agreed, and 16.9% (n = 60) disagreed. Lastly, 49.4% (n = 175) of the participants strongly agreed that they plan to use the Family-Centered Practices Profile in the future, 20.9% (n = 74) agreed, and 15% (n = 53) disagreed.

One open-ended question was included at the end of the utility survey that asked participants if any improvements could be made. Only 4% of the participants (n = 13) provided responses. They acknowledged the importance of working with interpreters while working with families, who were linguistically diverse; however, hiring a trained interpreter was dependent upon the program's available resources. One participant suggested rewording the item and including cultural brokers. Other suggestions were focused on (1) additional items about cultural competence, understating belief systems, and following family customs, and (2) available online for practitioners.

CHAPTER V

DISCUSSION

The primary purpose of this study was to develop and validate a new measure, the Family-Centered Practices Profile that aims to assess the quality of practices that support a family-centered approach in EI/ECSE programs. Two content validity analyses were conducted with two independent expert groups: parents and professionals. Principal axis factor analysis with varimax rotation was computed to assess the underlying structure for the items of the Family-Centered Practices Profile on data gathered from 354 participants. Lastly, the utility of the profile for service providers was examined.

Interpretation of the results and their implications for research are discussed in this chapter. In addition, study limitations and suggestions for future research are described.

Content Validity

According to the Standards for Educational and Psychological Tests, test developers must show that their tests are valid (American Psychological Association, 1999). Haynes, Richard, and Kubany (1995) define content validity as the degree to which elements of an assessment instrument are relevant to, and representative of, the targeted construct for a particular assessment purpose. Lennon (1956) states that content validity is a dimensional, rather than categorical, aspect of an assessment instrument. Based on the need to methodically create items, content validity of a measure depends on the degree to which items are representative of a particular construct (American Psychological Association, 1999).

A critical element for an assessment tool, content validity, is based on judgments by an expert group expected to have extensive knowledge and experience of the concept being measured. To assess the adequacy of test content, it has been typically recommended that experts be asked to evaluate (1) how well each item corresponds to the defined content domain that the item was written to reflect, and (2) how well each domain represents the construct (Haynes, Richard, & Kubany, 1995; Lawshe, 1975). Although, content validity is not frequently reported, its importance cannot be underestimated. Especially in educational sciences, it can be very difficult to measure the content validity of an instrument. Often, there are numerous related factors, making it practically impossible to account for them all. Assessing content validity helps a researcher to find potential flaws early in the development process, but does not indicate that the instrument has been proven to function appropriately. If an instrument appears to be valid at this point, the researcher will then need to explore its psychometric properties.

Parent Ratings

Parents were invited as experts to complete a content validity survey. Only one respondent was used per family, parents were not introduced to each other, and parents were recruited from different EI/ECSE programs to prevent contamination effects. Overall, a diverse group of parents in terms of education, culture, language, socio-economic status, and years of experience with receiving EI/ECSE services completed the survey and rated 68 items based on representativeness, consistency, and essentiality on a three-point scale.

Results for the first research question indicated that of the 68 items assessed, 31 were considered to have insufficient content validity (CVR < .62, α < .025). All the

remaining items were valid with CVRs ranging from 0.80 to 1.00 and were retained. Based on the feedback received, minor revisions regarding the wording of the items were completed. Overall, there was a 45.5% reduction in items. Consequently, 8 items focused on parent support, 8 items on environment, 6 items on communication, 5 items on service delivery, and 4 items on program were eliminated. Interestingly, 8 items were deleted from parent support and environment domains. This elimination did not severely affect the parent support domain, because there were 8 more remaining items. Nevertheless, all of the items in the environment domain were eliminated. It appears in this study that a family-friendly classroom environment was not a functional discriminator of family-centered practice. It can be said that items about interpersonal skills that require education, experience, and cultural competence are more appreciated by parents rather than items about the physical classroom environment.

The findings in this research study concurred with previously published research studies. Previous studies indicated that collaborative partnerships, which include communication, parent support, service delivery, with families within a family-centered approach is not only a recommended practice, but also constitutes a quality indicator for EI/ECSE programs (Murray & Mandell, 2006; Sandall, et al., 2005).

In the Family-Centered Practices Profile, the concept of family-centered practices represents the idea of families as equal partners with professionals in the early intervention process. This idea was essential in the development of items because it views quality as a reflection of the extent to which adjustments of various elements of the program can be individualized to address each family's unique needs, priorities, and concerns. This conceptualization is aligned with DEC Recommended Practices

(Hemmeter & Salcedo, 2005) and the NAEYC Standards for Early Childhood Professional Preparation Programs (NAEYC, 2009).

There is an important reason for obtaining content validity on family-centered practices from parents: not all parents are able to participate in program evaluations and, as *equal partners*; parents should be given an opportunity to share their perspectives and first-hand experiences about family-centered practice. The Family-Centered Practices Profile evaluates two different perspectives: the implementation of family-centered practice through the eyes of the parents and professionals. The voices of these parents in this study represent evidence that they have a clear image of a family-centered approach.

Professional Ratings

Professionals were invited as experts to rate the content validity of the remaining 37 items, using a three-point scale. In addition, each item included the possibility of proposing alternative wording, and professionals were asked to provide feedback on the response option of the profile. A majority of professionals had more than 26 years of experience in the EI/ECSE field, and were accepted as experts regarding family studies.

The results of the professional ratings indicated that of the 37 items assessed, 13 were considered to have insufficient content validity (CVR < .62, α < .025). Professional ratings of content validity on aspects of Family-Centered Practices Profile yielded a 35% item reduction. CVI values range between .66 to .83. This result might mean that the items in the parent support and communication domains represented a good operationalization of the underlying construct; whereas the items in the service delivery domain only moderately operationalized the underlying construct. It is possible that different domains may require a different level of proficiency.

Although three items received insufficient CVRs, the investigator chose to keep those items: (1) “use person first language”, (2) “choose screening tools that involve parents”, and (3) “provide family-friendly education materials, for example magazines, DVDs, etc.” The American Speech Language Hearing Association (ASHA) advises using person first language and emphasizes the person, not the disability, by putting the person-noun first (ASHA, 2003). Similarly, Head Start programs recommend using person first language such as “a child with disabilities” instead of a “disabled child” (Head Start, 2000). Some might believe that adherence to person first language constitutes excessive political correctness, creates cumbersome sentences, and causes an unproductive communication. In contrast to the professionals’ feedback, the item about person first language was kept in the profile, because person first language is a recommended practice, endorsed by many professional organizations, and intended to increase the level of respect in interactions between service providers and families.

Regarding the item focused on screening tools, parents are accepted as valuable resources regarding their child’s strengths, interests, and needs. Active participation of families during the screening and assessment procedures is a recommended practice and accepted as an example of a family-centered approach (Sandall, et al., 2005). Similarly, sharing family-friendly reading materials is a suggested family-centered approach (Sandall, et al., 2005). Regarding the item focused on family-friendly education materials, programs are expected to offer a variety of materials and resources developed specifically for families. Education materials may (a) provide valuable information about child development and learning, (b) help families form partnerships with their service providers, and (c) empower families to advocate for their child’s interests and needs.

Families want and need materials that have the same information used by their service providers, written in a way that they can understand and easily refer to when needed. These items were retained as well, based on professional standards of practice. On the basis of professionals' feedback received, the Family-Centered Practices Profile underwent a final revision, primarily aimed at providing observable and measureable examples of family-centered practices.

The items that received valid CVRs seem to require a high level of planning (i.e., "Gather information to determine the family's level of interest in their involvement in implementing Individual Family Service Plans (IFSPs) and/or Individualized Education Programs (IEPs)"), cultural competence (i.e., "Develop strategies with families on how their culture can be represented in the early intervention process"), training and experience (i.e., "Communicate screening and/or assessment results clearly"), and inter-agency teamwork (i.e., "Receive supervision and training on family-centered practices"). One interpretation is that to develop a deep understanding of family-centered practice, service providers need considerable content knowledge and acquisition of specific skills (Murray & Mandell, 2006; Pretti-Frontczak, 2002). Trained service providers may also be needed to implement a family-centered approach.

Summary. A decomposition diagram (Figure 4) displays the functional mapping of this research study. The objective of the functional decomposition is to illustrate the steps and activities followed to develop the profile, including (1) exploratory research, (2) conceptualization, (3) item generation, (4) expert review, and (5) field test (Goodwin & Leech 2003; Pedhazur & Schmelkin, 1991).

These steps were followed to obtain content validity evidence. Two independent expert groups were recruited: parents and professionals (Goodwin & Leech 2003; Pedhazur & Schmelkin, 1991), each composed of 10 members, which is why a minimum CVR of .62 was required ($\alpha < .025$, one-tailed) (Wilson, Pan, & Schumsky, 2012). This method was used to (a) measure the content validity of the profile with a high CVR, (b) analyze the obtained scores using rigorous statistics, and (c) make a better attempt to choose observable items that represent family-centered approach.

Content validity results led to an improvement in the item pool related to representativeness of family-centered practice in the field and formal wording. The validation studies reported here provided support for the content validity of the profile, and suggested that family-centered practice is a meaningful construct to assess in EI/ECSE. The content validity phase is important, and the CVI, as well as expert groups, indicated useful information that led to necessary modifications.

Factor Analysis

Initially, principal axis factor analysis with varimax (orthogonal) rotation was conducted to assess the underlying structure for the 24 items, remaining after professional feedback, of the Family-Centered Practices Profile, based on data from 354 participants. During several steps, three items were eliminated, because they did not contribute to a simple factor structure and failed to meet minimum criteria of having a primary factor loading of .4 or above, and no cross-loadings of .3 or above. A second principal axis factor analysis of the remaining 21 items, using varimax (orthogonal) rotation was conducted, with the three factors explaining 28% of the variance.

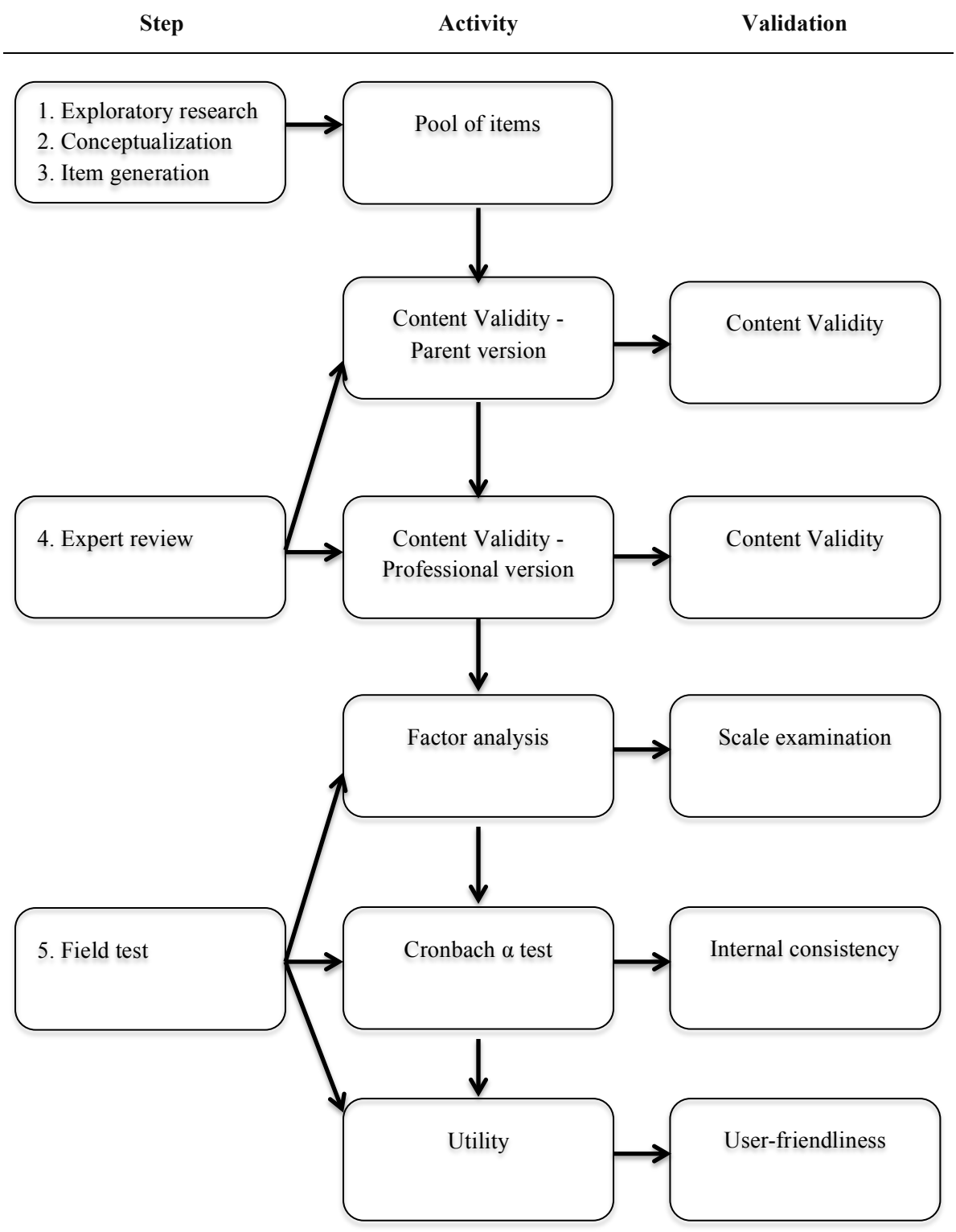

Figure 4. Functional steps for research study process.

Varimax, the most commonly used orthogonal rotation was undertaken to rotate the factors to maximize the loading on each variable and minimize the loading on other factors (Field 2005). A three-factor structure for 21 items was evident, based on principal axis factor analysis. The item pool originally contained 68 items, and after two content validity and factor analyses, 21 items were left.

Overall, there was a 69.1% item reduction. It appeared that the total number of items in the pool was sufficient to supply informative results throughout the analyses processes. Moreover, the items in the pool appeared to have characteristics that provided adequate information at the service provider's proficiency levels of family-centered practices for the researcher. In other words, there were sufficient numbers of items whose difficulty parameters indicated useful information on service providers' proficiency of implementing family-centered practice. Table 15 provides a summary of the item reduction process.

Table 15. Summary of the item reduction process.

Process	Number of Items	Number of Deleted Items
Item pool	68	NA
Content validity parent version	37	31
Content validity professional version	24	13
1st Factor analysis	24	3
2nd Factor analysis	21	NA

Note: NA = Not applicable

Deleted items. During the factor analyses process, three items were deleted. All of the eliminated items were focused on implementation of family-centered practice at the program level. The first deleted item (i.e., "Provide opportunities for family

involvement in the decision-making process.") was not a critical practice for service providers in this study. On one hand, parent advisory groups may benefit families and service providers by (1) fostering collaborative relationships and sharing different perspectives, (2) increasing families' knowledge of EI/ECSE programs, and (3) increasing the families' sense of efficacy and participation in the development and education of their child. On the other hand, organizing and cooperating with a parent advisory group may not be a practical option for service providers who may have hectic work schedules. Moreover, service providers may provide alternative solutions to value parent voice such as informally discussing parents' needs and having an open-door policy to encourage parent involvement.

Another deleted item (i.e., "Attend conferences, workshops, or webinars on family-centered practices.") was important and necessary for service providers, but due to substantial budget cuts in the field, they may not be able to attend training events. Community-based Part C EI/ECSE programs and Head Start programs are financed through an mélange of government contracts and grants, foundation grants, and charitable donations. With an unstable economic system, to make the best possible use of funding, program directors may choose different options rather than ongoing professional development. This may also be due to the limited number of local conferences focusing on family-centered practices. Moreover, service providers may choose alternative methods to improve their knowledge on family-centered practices, such as learning from each other's experiences or following recent publications.

Another deleted item (i.e., "Exhibit positive images of families in photos and posters that vary in culture, family type, and ability") may not have been rated positively

because participants were recruited from only five states. Exhibition of images that vary in culture, family type, and ability may not be a representative practice for service providers in this study. Moreover, service providers may use photos of children with their families in their classroom as a family tree; and they may not feel they need additional photos to represent diversity. Furthermore, the exhibition of positive images of families that vary in culture, family type and ability can be achieved in many different ways. For instance, service providers can address this issue by reading children books about diversity, following an anti-bias curriculum approach, and including toys that promote diversity.

Factors. In this study, a 5-point (1 = "*don't know/not applicable*", 2 = "*never*", 3 = "*rarely*", 4 = "*usually*", and 5 = "*every time*") format was employed so that high scores were associated with greater use of the family-centered practice. After consulting with the literature on family-centered practice, factors were labeled with names based on the highest factor loadings. Communication was the factor that participants reported using the most, followed by parent support and service delivery factors. Overall, these analyses indicated that three distinct factors (communication, service delivery, and parent support) were underlying participants' responses and these factors were internally consistent. The principal axis factor analysis utilized in the construction of the profile helped to clarify the nature of the items underlying family-centered practice.

The results of this research study should not be construed, however, as implying that family-centered practices in EI/ECSE can be comprehensively described and assessed in terms of three factors. The three domains of the profile should be perceived as assessing a sampling of the domains most relevant to the measurable and functional

indicators of family-centered practice. Empirically derived constructs revealed robust internal consistency and showed a solid factor structure with positive loadings. Therefore, this profile shows promising evidence to inform service providers about implementation of family-centered practices. Such information could facilitate program evaluations to enhance the quality of services for parents and their children with special needs. States are also trying to make informed decisions about quality investments based on their effectiveness in achieving positive outcomes. State interest in QRIS implementation is being driven by a desire to improve outcomes for all children in childcare, including children with special needs and their families. QRIS aims to define quality for early childhood programs and what the fundamental components are for a high-quality early care and education system. Furthermore, QRIS offers coaching and resources for child care providers. To further promote positive outcomes for children and their families, program quality standards can include documentation of family-centered practice.

Response format. Since Likert-type response format is easier to use in instruments that measure opinions, beliefs, or attitudes, a 5-point Likert-type self-rating scale (1 = "*don't know/not applicable*" to 5 = "*every time*"); with summative scoring was tested. In some cases, implementing a family-centered practice may not be applicable. For instance, an early interventionist may work in an environment where linguistic diversity does not exist and working with trained interpreters is a "*not applicable*" choice. Similarly, responding to an item such as "provide families information about various local, state, and national level resources to address both child and family needs" may require a "*don't know*" choice for a respondent who is not familiar with local, state, and national level resources.

Feasibility of the profile in terms of the ease of administration and processing were also of concern. Self-rating scales that are difficult to administer and process may jeopardize the conduct of research and disrupt the utility of the tool. An obvious example is that additional resources may be required for an interview-type administration. Furthermore. Staff training might be considered before the interview. Therefore, the profile was designed in an online form.

Item selection. The item-writing phase of the profile was critical to the success of the research study, as high quality items were essential for good measurement of family-centered practice. The generation of items during questionnaire development required considerable time and effort to refine wording and content. The type of question, language used and order of items may all bias response. Attention was given to the order in which items appeared. Controversial and non-observable items were avoided to prevent ambiguity. Moreover, items that included double negatives were avoided with all of the items positively worded. To allow respondents to provide more in-depth responses, an open-ended text response item was included at the end of the profile. Figure 5 illustrates three items in the final form.

Individual items and scales were examined to determine whether they concord with the profile objective. It can be said that most of the items function in a cross-sectional and longitudinal fashion. For instance, an item asking about working with trained interpreters to support families who are linguistically diverse may be useful to learn about cultural cues such as proximity and personal space, eye contact, and dress code.

Family-Centered Practices Profile					
Instructions: For each item, please fill in the circle that most appropriately captures the current status of the family-centered practices in your classroom.					
	Every time	Usually	Rarely	Never	Don't know/not applicable
Domain: Communication **As a professional, I**					
1. Gather information to determine the family's level of interest in their involvement in implementing Individual Family Service Plans (IFSPs) and/or Individualized Education Programs (IEPs).	○	○	○	○	○
2. Avoid using jargon, labels, and technical terms. If those cannot be avoided, I explain their meanings and provide examples.	○	○	○	○	○
3. Use person first language.	○	○	○	○	○

Figure 5. Family-Centered Practices Profile.

Provider Utility

The overall scores by service providers on a 4-point Likert scale were high for all questions, ranging between 3.07 to 3.27. Based on overall ratings of the utility survey, it can be concluded that most survey respondents approved of the profile and that it appeared to be a useful and efficient instrument.

Approximately 74% of participants agreed that the questions on the survey were important. This indicates that items represented key concepts of family-centered approach, such as (a) equal partnerships and collaboration (Dunst, Boyd, Trivette, & Hamby, 2002; Dunst, 2002; Espe-Sherwindt, 2008; Woods, Wilcox, Friedman, & Murch,

2011), (b) individualized intervention for each family and child (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004; Epley, Summers & Turnbull, 2011), and (c) culturally and linguistically sensitive and responsive practices (Fults & Harry, 2011; Iversen, Shimmel, Ciacera, & Prabhakar, 2003).

Seventy-five percent of service providers agreed that items were easy to understand. Although the profile was written at a 12th grade level, this level did not appear to affect ease of understanding. Issues pertaining to reading level while developing the profile were examined, as well. The issue of high reading level was addressed by forming an advisory panel from dissertation committee members who reviewed profile content to help insure it conveyed intended meaning. The items were examined in the light of following three questions: (1) "Would service providers likely have the experiences and prior knowledge necessary to understand what the item requires?", (2) "Is the vocabulary appropriate for the intended grade level?", and (3) "Are definitions and examples clear and understandable?" The ultimate goal was to select measureable and observable items that communicate clearly and precisely, yet not too narrowly or pedantically. Their recommendations led to minor changes in the profile.

In addition to ease of understanding, 69% of participants agreed that the questions were useful in their work with families, reflecting a functional and efficient tool. Moreover, participants were asked whether they were willing to change their routines to implement these practices and whether carrying out these practices would fit into their routines. Seventy-three percent of participants agreed that they were willing to change their routine to implement these practices. The profile may help EI/ECSE providers notice ideas about family-centered practices and may be a valuable training and

awareness tool. Sixty-nine percent of participants agreed that carrying out these practices would fit into their existing routines. This result indicates that implementing items in the Family-Centered Practices Profile would not interrupt classroom routines. Participants' willingness to change their routines may also indicate that service providers acknowledged the necessity of following a family-centered approach while working with families.

Finally, 70% of participants agreed that they plan to use the Family-Centered Practices Profile in the future. This finding indicates that the profile appears to be a useful and functional tool. Lastly, open-ended question asked participants if any improvements could be made to the profile. Thirteen participants (4%) provided responses, which focused on cultural and linguistic diversity. This result might be due to the fact that early childhood education settings, including Head Start classrooms, and community-based Part C early intervention programs have become increasingly diverse institutions (Fults & Harry 2011; Sewell, 2012). This diversity brings new opportunities as well as new difficulties. Therefore, service providers may need more tools and specific strategies to address needs of families who are culturally and linguistically diverse. There are three items focused on cultural and linguistic diversity in the profile. Working effectively with families from cultures that differ from one's own requires an understanding of one's own attitudes and values as well as awareness of one's culture and ability to communicate influence relationships. These items may inspire service providers to promote further ideas and to work effectively with families who are culturally and linguistically diverse.

Limitations and Future Studies

This study has several limitations that are suggestive of additional work to further assess the profile, including location, sample size, recruitment of participants, and data collection process. To begin, because the purpose was to explore family-centered practices in EI/ECSE programs, during the first three phase of the study (exploratory research, conceptualization, and item generation) in situ observations were conducted within one state to limit possible variation that might be introduced by different state standards and policies (i.e., QRIS and kindergarten readiness initiatives). This decision, however, limits the variability of EI/ECSE program structures that the researcher might have observed and removes the opportunity to investigate how different state standards and policies might influence implementation of family-centered practices. Although parents were recruited from different EI/ECSE programs, they were residents in the same state, and did not have previous experience regarding family-centered practice in another state. Thus, the results may not be an accurate representation of the attitudes and behaviors of EI/ECSE service providers. Future studies should be designed to conduct observations in different states and/or collaborate with service providers from different states to collect broader evidence on implementation of family-centered practices. I believe, however, that this study has value in that it sheds light on the assessment of service providers' implementation of family-centered practice.

A common concern for researchers is the extent to which respondents participating in a tool development process are a representative sample of the larger population with which the tool will be used in the future. For parents and professionals, a quota sampling method was used. The researcher set quotas before the data collection

process. A certain number of participants was determined to obtain content validity using rigorous statistics, yielding a relatively small sample. If the number of participants had increased to 20, a minimum CVR of .43 would be required; or if it was further increased to 30, a minimum CVR of .35 would be required ($\alpha < .025$) (Wilson, Pan, & Schumsky, 2012). Demographics of the parents and professionals revealed a diverse group of participants, and decreased the possibility of biases with regard to the targeted characteristics. A common concern with CVR rating process, however, is that only 10 experts rate the survey items, posing a risk that all participants rate every item the same way. A case-by-case inspection revealed that participants rated items differently, ensuring that a pattern was not observed among ratings.

For EI/ECSE service providers, sample size was calculated at 377 participants, with a margin of error at 5%, confidence level at 95%, and the response distribution at 50%; yet the sample included a total of 354 participants was relatively small (Barlett, Kotrlik, & Higgins, 2001). A small sample size impacts the external validity of the study limiting the generalization of the study findings. Particularly, when conducting factor analysis, larger samples and larger loadings are needed to allow accurate production of a factor pattern (Floyd & Widaman, 1995; MacCallum, Widaman, Zhang, & Hong, 1999; Velicer & Fava, 1998). Further research should employ random sampling with a larger number of participants.

In addition to a relatively small sample size, another significant limitation of the study design was the recruitment process. EI/ECSE service providers were recruited from five northwestern states that may not be representative of all EI/CSE service providers in the United States. Given that the goal of this research study was to develop a functional,

efficient, and user-friendly tool that could be used by EI/ECSE service providers, future work should be conducted with a larger sample size. A larger and more diverse sample may have resulted in additional or different suggestions for content improvement. Furthermore, gathering more utility data would be beneficial in establishing the profile's usefulness across early childhood programs.

Family-Centered Practices Profile was designed as self-assessment tool, which might have created a threat to construct validity. Self-reports can be affected by participant motivation (Shadish, Cook, & Campbell, 2001). The participants might have overrated or underrated themselves, forgot to report pertinent details, or had a challenging life experience during data collection. Moreover, participants may have interpreted and used the Likert-type scale response anchors differently. Responses were on a Likert-type scale, (1 = "*don't know/not applicable*" to 5 = "*every time*"); what one participant might have rated as "*every time*" a different participant with the same opinion might have rated as "*usually*." This might produce differences in scores between participants. Because the profile is a newly developed tool, the results from this study should be interpreted cautiously. Future research focused on assessment of family-centered practices would benefit from employing multiple tools to collect data from service providers.

While this study contributes to our understanding of family-centered practice, future studies are needed to examine additional psychometric properties of the profile, including test-retest reliability, and convergent validity. However, it may be that more specific and more aligned instruments based on a broader set of items and on more advanced psychometric methods are needed. Such a focus on the psychometric development of instruments to assess family-centeredness in EI/ECSE programs could

result in the observation of stronger associations thereby providing better instruments of improving and monitoring EI/ECSE service providers' implementation of family-centered practices. Moreover, future research is warranted to explore factors inherent with working with culturally and linguistically diverse families. Inclusion of newer items reflecting family-centered practice about cultural and linguistic diversity should be considered for future research. In addition to responding to cultural and linguistic diversity, future studies should consider translation and adaptation of the tool into additional languages such as Spanish, simplified Chinese, Korean, and Arabic.

Another area for future research is to continue to examine the scoring and interpreting of scoring functions. After a user completes the profile, a score for each domain as well as a total score should be provided. Converting the score in each domain to a total score could help identify the areas that are most in need of improvement. Results may suggest several strategies based on one's score to improve implementation of family-centered practice. To achieve these goals, future studies should consider making this tool available online.

Implications

The important association between family-centered practice and positive outcomes for children and their parents has been acknowledged. Several researchers have reported effective and functional tools to be used. However, in contrast with the literature, only a limited amount of research has studied assessment of family-centered practice in EI/ECSE programs (Sandall, et al., 2005; Summers, Hoffman, Marquis, Turnbull, et al., 2005; Wilson & Dunst, 2005).

The current study adds to the research base because of the methodology employed. Two independent expert groups were surveyed and solid evidence was provided on content validity. Following the expert review process, the profile was revised and piloted in five Northwestern states, to explore its factor pattern and utility. As a research tool, it may allow researchers to measure and compare quality across various types of programs, as well as to investigate the relationship between family-centered practices and desired family outcomes. Furthermore, the profile may be used in conjunction with other measures for assessing adherence to family-centered practices, such as the Family-Centered Practices Checklist (Wilson & Dunst, 2005), the Family-Professional Partnership Scale (Professional version) (Beach Center on Disability, 2006), and Parent Checklist (Hemmeter & Salcedo, 2005).

Despite the acknowledgment of the importance of family-centered approach by federal legislation, there is little research evidence to help EI/ECSE service providers document their implementation of these practices. Additionally, as programs struggle with funding to provide individualized supervision to staff members, the profile may benefit program evaluation efforts.

In practice, this self-rating scale may assist service providers to monitor their own practice and improve the quality of services in terms of family-centeredness. Efforts to promote family-centered practice in quality improvement initiatives encourage providers to recognize their own strengths and weaknesses regarding their ability to implement family-centered practices. Study results indicated that EI/ECSE service providers across programs and states might need more in-depth training in responding to family needs and interests. Some participants appeared to have higher scores on communication, and lower

scores on parent support and service delivery. The items of the profile might be a useful model for professional development and increase the frequency of service providers' implementation of family-centered practice. Ultimately, the primary purpose of this research study was to describe the development and validation of the Family-Centered Practices Profile and highlight the importance of family-centered practices in the field, with the long-term goal of improving the quality of family-centered practices.

Conclusion

While the results of this study are encouraging, they should be interpreted cautiously. In order to fully understand family-centered practice further investigation is important (Dunst, Boyd, Trivette, & Hamby, 2002; Dunst, Trivette, & Hamby, 2007; Epley, Summers, & Turnbull, 2011). Family-centered practice involves multifaceted and complex relations among many aspects of behaviors including communication, parent support, and service delivery. Research regarding implementation of family-centered practice, may lead to better family, child, and service provider outcomes. Understanding how family-centered practice is embedded in recommended practices and professional standards, as an evidence of "quality" will help us improve our efforts to better assess implementation of family-centered practice and to provide enhanced services to families in EI/ECSE programs.

APPENDIX A

INFORMED CONSENT FOR PARENTS

University of Oregon
Early Intervention Program
Parent/Caregiver Consent to Take Part in Research of Family-Centered Practices Profile

Serra Acar, M.Ed., Doctoral Candidate
Jane Squires, Ph.D., (Advisor)

Introduction

- You are invited to participate in a research study conducted by Serra Acar, M.Ed., a doctoral student in the Early Intervention Program at the University of Oregon. As a part of my dissertation I am gathering information on the Family-Centered Practices Profile.
- Please read this form. Ask any questions that you may have before agreeing to be in the study.

Why I have been asked to take part in the study?

- Because you have a child between the ages of 6 months and 5 ½ years.

What is the purpose of this study?

- We are studying family-centered practices in the early intervention/early childhood special education procedures.
- We want to find a way to effectively support parents who have children with special needs. We believe parents' feedback would provide valuable information to evaluate and identify family-centered practices.

What will my participation involve?

- If you agree to be in this study, we would ask you to do the following things:
    - Complete 1 questionnaire about your family and your child, such as education and ethnicity
    - Read the Family-Centered Practices Profile
    - Complete 1 questionnaire about your feedback on the Family-Centered Practices Profile
- Your participation will require about 1.5 hours total time.
- You will receive a gift certificate, after all questionnaires are completed.

Are there any risks to me?

- In every study there are risks. However, we do not think you will encounter any risks.
- Researchers follow rules to make sure records are kept private.

Are there any benefits to me?

- You may experience good feelings for helping early interventionists who are trying to improve their practices while working with families who have children with special needs
- I cannot guarantee that you will personally receive any benefits from this study.

Are there any costs for participation?

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

How will my confidentiality be protected?

- Your participation will be kept anonymous.
- In any type of report we may write, we will not include your name.
- Access to research records will be limited to researchers.
- All the records will be kept in a secure and locked area with access limited to designated researchers.
- The researchers will destroy recordings within three years.

What if I choose to not to take part or leave the study?

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

Who can I contact if I have any questions?

- You can contact
    - Call Serra Acar at 919-308-2395 or email acar@ureogon.edu
    - Call Dr. Jane Squires at 541-346-0807 or email jsquires@uoregon.edu
- If you have any questions about your rights as a person taking part in a research study, you may call: Office Protection of Human Subjects, University of Oregon at 541-345-2510, human_subjects@uoregon.edu.

Copy of consent form

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

Statement of Consent

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

Study Participant (Please print your name here): _____

Sign here: _____

Today's date: _____

APPENDIX B

RECRUITMENT MATERIALS

Parents/Caregivers/Fathers Needed for a Study!

- ✓ Do you have a child with special needs between the ages of 2 and 5 years?
- ✓ Work approximately 2 hours and receive a $50 gift card for your time and commitment!

The University of Oregon Early Intervention Program seeks your help to learn more about family-centered practices in the early intervention process.

To find out more please contact Serra Acar

Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study	Serra Acar 919-308-2395 or acar@uoregon.edu Family-centered practices Research Study

RESEARCH PARTICIPANTS NEEDED

Are you working with young children with special needs?

This study aims to develop a measure that is designed to assess the frequency of practices that support a family-centered approach in childhood special education programs.

The **University of Oregon**, **Early Intervention Program** needs participants for a research study: "Development and Validation of the **Family-Centered Practices Profile**"

Who can participate:
A service provider who has at least one year of experience working with young children with special needs would be eligible to participate.

How to participate:
Click or copy/paste the link below to take the online, anonymous survey, which may take about 15-20 minutes.

https://oregon.qualtrics.com/SE/?SID=SV_8IiU494zWBviaSF

At the end of the survey, you will have a chance to enter into a drawing for $50.00 Amazon gift cards. There are 14 gift cards and chances of winning are approximately 4 out of 100.

For more information, please contact:
Serra Acar acar@uoregon.edu

Parent Recruitment E-mail

Month/Day/2013

Dear …….. (Parent name)

My name is Serra Acar and I am a doctoral candidate at the University of Oregon Early Intervention Program. I am working on my dissertation study, Development and Validation of Family-Centered Practices Profile under the supervision of Dr. Jane Squires (jsquires@uoregon.edu). The Family-Centered Practices Profile is a structured observation rating scale designed to assess the quality of provisions and daily classroom practices that support the family-centered practices in early intervention programs.

I am writing to invite you to participate in my dissertation study. You're eligible to be in this study because you have a child with special needs. I obtained your contact information from [*describe source*].

If you decide to participate in this study, you will be asked to fill out survey questions, which may take approximately two hours. Incentives will be provided for your time and efforts. This project is funded by Davis Bricker Award for Student Research, College of Education, University of Oregon.

Remember, this is completely voluntary. You can choose to be in the study or not. If you'd like to participate or have any questions about the study, please respond to this email or call me at 919-308-2395.

Thank you very much.
Sincerely,
Serra Acar
acar@uoregon.edu

Doctoral Student
Early Intervention Program
University of Oregon

Early Interventionist/Service Provider Recruitment E-mail

Month/Day/2013

Dear …….. (Early interventionist/ Service Provider)

My name is Serra Acar and I am a doctoral candidate at the University of Oregon Early Intervention Program. I am working on my dissertation study, Development and Validation of Family-Centered Practices Profile under the supervision of Dr. Jane Squires (jsquires@uoregon.edu). The Family-Centered Practices Profile is a structured observation rating scale designed to assess the quality of provisions and daily classroom practices that support the family-centered practices in early intervention programs.

I am writing to invite you to participate in my dissertation study. You're eligible to be in this study because you are working in the field of early intervention/early childhood special education. I obtained your contact information from your agency's web site.

If you decide to participate in this study, you will be asked to fill out survey questions, which may take approximately two hours. Incentives will be provided for your time and efforts.
This project is funded by Davis Bricker Award for Student Research, College of Education, University of Oregon.

Remember, this is completely voluntary. You can choose to be in the study or not. If you'd like to participate or have any questions about the study, please respond to this email or call me at 919-308-2395.

Thank you very much.
Sincerely,
Serra Acar
acar@uoregon.edu

Doctoral Student
Early Intervention Program
University of Oregon

Professional Recruitment E-mail

Month/Day/2013

Dear …….. (Professional)

My name is Serra Acar and I am a doctoral candidate at the University of Oregon Early Intervention Program. I am working on my dissertation study, Development and Validation of Family-Centered Practices Profile under the supervision of Dr. Jane Squires (jsquires@uoregon.edu). The Family-Centered Practices Profile is a structured observation rating scale designed to assess the quality of provisions and daily classroom practices that support the family-centered practices in early intervention programs.

I am writing to invite you to participate in my dissertation study. You're eligible to be in this study because you are working in the field of early intervention/early childhood special education. I obtained your contact information from your university/research institute's web site.

If you decide to participate in this study, you will be asked to fill out survey questions, which may take approximately two hours. Incentives will be provided for your time and efforts. This project is funded by Davis Bricker Award for Student Research, College of Education, University of Oregon.

Remember, this is completely voluntary. You can choose to be in the study or not. If you'd like to participate or have any questions about the study, please respond to this email or call me at 919-308-2395.

Thank you very much.
Sincerely,
Serra Acar
acar@uoregon.edu

Doctoral Student
Early Intervention Program
University of Oregon

APPENDIX C

CONTENT VALIDITY RESULTS PARENTS' VERSION

Table 1. Content Validity- Parent Version.			
Domain	Item	*CVR*	Action taken
1	Service providers use people first language (Such as say "she has autism", instead of "she is autistic").	.80	Kept
1	There is an ongoing communication process with families (Such as journals, phone calls, monthly reports, parent meetings, etc.).	.40	Deleted
1	Service providers communicate at times convenient to parents.	.80	Kept
1	Service providers keep records of parent communication to follow-up on their needs and interests and track previous conversations.	.80	Kept
1	Service providers have alternatives to phone communication for families who lack phones.	.80	Revised
1	Service providers give their contact information (Such as phone and email) to parents.	.80	Revised
1	Service providers avoid the use of jargon and technical terms. If jargon cannot be avoided, they take the time to explain its meaning with examples.	1.00	Kept
1	The program has a family-friendly answering machine message with easy to follow directions.	.20	Deleted
1	There is a weekly program newsletter available in several formats (Such as print and online) and in the major languages of families.	.20	Deleted
1	The program sends home a calendar listing dates of parent-teacher conferences, report cards, holidays, and other major events.	.40	Deleted
1	The program maintains a website that provides up-to-date information for families.	.40	Deleted
1	Program website is translated into different languages.	.40	Deleted
1	Trained interpreters are available to work with linguistically diverse families.	.80	Revised
1	Members of the early intervention team are introduced and the roles and responsibilities of each team member is explained to the family.	.80	Kept

1	Service providers demonstrate respect for the family's preferred names (Such as ask “What do you go by?”).	.80	Kept
2	The program has a written statement about family-centered practices.	.80	Kept
2	The program’s commitment to family-centered practices is communicated with families, staff, and practicum students on regular basis (Such as ethics, mission, and core values).	.80	Kept
2	There is a family advisory group involved in the development of program policies.	.80	Kept
2	A committee of family and staff members develops individually sensitive policies related to holidays and birthday celebrations.	.20	Deleted
2	Family input is routinely obtained as a basis for making changes in the program.	.20	Deleted
2	The program has an open-door policy.	.20	Deleted
2	There is a parent volunteer program that reevaluated periodically.	.20	Deleted
2	Families are provided with opportunities to participate in classroom activities.	.80	Kept
2	The program invites fathers/male caregivers to actively participate in classroom routines, not just activities that reflect typical father/male roles.	.20	Deleted
2	Social activities are organized to support family involvement (Such annual open house, back-to-school nights, potlucks, family picnics, ice-cream socials, etc.)	.80	Kept
2	The program participates in a network, collaborates with organizations or their local chapters (Such as Division for Early Childhood, Parents as Teachers, National Association for the Education of Young Children, etc.) that encourage family-centered practices statewide.	.20	Deleted
2	The program protects family privacy and confidentiality (Such as do not share files with third parties without family’s written consent).	1.00	Kept
2	The program provides in-service supervision, training, and resources to service providers on family-centered practices (Such as communicating with diverse families, supporting father involvement in early intervention, etc.).	1.00	Kept

2	Service providers attend to regular trainings, conferences, seminars, or webinars to improve their knowledge and abilities.	.80	Revised
3	Main lobby or entrance creates a first impression of "welcome."	.20	Deleted
3	There is a resource room or an area (Such as books, magazines, journals, DVDs, etc.) for parents.	.20	Deleted
3	Posted signs are in primary languages spoken in the community.	.20	Deleted
3	There is a family bulletin board in the primary languages of families.	1.00	Kept
3	Positive pictures of parents and children, and diverse family types (Such as grandparents and single parents) in photos, and posters are exhibited.	1.00	Kept
3	Accommodations are available for families to have a private conversation.	.20	Deleted
3	A gender-neutral color scheme is used.	.20	Deleted
3	Forms for parents (Such as intake forms and surveys) are gender neutral.	.20	Deleted
4	Service providers and families are engaged as partners in the eligibility evaluation and ongoing assessment process.	.80	Revised
4	Eligibility evaluation and ongoing assessment results are communicated in a manner easily understood and appropriate to the family (Such as family members are encouraged to ask questions; explanations with examples are provided, etc.).	8.0	Kept
4	Service providers use family-friendly screening and assessment tools.	.80	Kept
4	Service providers chose screening and assessment tools in family's native language, when feasible.	.80	Kept
4	Service providers determine child's strengths and needs with his/her parents.	.80	Revised
4	Individual Family Service Plans (IFSPs) and Individualized Education Programs (IEPs) are written in collaboration with parents (Such as service providers develop functional and meaningful goals with parents.).	.80	Revised
4	Family involvement in implementing IFSP/IEP is determined by the family's level of interest.	.80	Revised

4	Service providers collaborate with families to collect data to evaluate IFSPs/IEPs.	.20	Deleted
4	Service providers record video sessions to inform parents about their child's development and learning.	.20	Deleted
4	Service providers ask families for ideas on how their culture can be incorporated in the early intervention process.	.80	Revised
4	Early intervention services are delivered in child's natural environment (Such as child's home, recreation facility, early care and education setting, park, etc.).	.80	Kept
4	Families are able to make requests for when early intervention services will be delivered to accommodate their personal schedule and routine.	.40	Deleted
4	Service providers include family members (Such as siblings and grandparents) to the early intervention process, when feasible.	.40	Deleted
4	Service providers embed goals in family routines and activities.	.40	Deleted
4	Service providers acknowledge and celebrate success with family.	.40	Deleted
5	Service providers inform parents about their rights.	.90	Kept
5	Service providers assist parents to advocate for their rights.	.40	Deleted
5	Service providers periodically survey parents to determine their concerns, priorities, and resources.	.40	Deleted
5	The program offers regular parent training sessions based on family needs and interests (Such as promoting child's social skills).	.40	Deleted
5	During parent training sessions, complimentary childcare, parking, and food are provided so that families are able to attend.	.20	Deleted
5	Parent education materials appropriate for readers of varying literacy levels and for speakers of different languages are readily available.	.90	Revised
5	Service providers offer ongoing information, consultation, and technical assistance to families related to the special needs of their child.	.80	Revised
5	Service providers assist parents in understanding the information in their child's records.	.20	Deleted

5	Service providers teach family how to use technology to access information.	.80	Revised
5	Support is provided to families involved in an adverse event (Such as loss of a family member).	.20	Deleted
5	Service providers offer information about respite care.	.20	Deleted
5	Service providers offer formal and informal opportunities for parent-to-parent support groups (Such as mentoring network, linking families to generic, disability specific advocacy, or support groups).	.80	Revised
5	Program provides with a written list of various local and state level resources that can support both child and family needs.	1.00	Kept
5	Service providers support families in identifying and accessing natural community-based supports and resources.	.80	Revised
5	Service providers offer support to families during the child's transition between programs (such as questions and answer sessions, program visits, etc.)	1.00	Kept
5	Service providers support families in utilizing existing strengths, resources, and coping skills.	1.00	Kept

Note. 1 = Communication, 2 = Program, 3 = Environment, 4 = Service Delivery, and 5 = Parent Support.

APPENDIX D

MEASURES

Parent Information Form

Today's date: (month/day/year)

Please tell us about yourself …

Please circle or complete the following information for each question.

1. Are you:

a. Mother

b. Father

c. Grandparent

d. Legal guardian

e. Foster parent

f. Other (please specify) …….

2. What is your age?

a. 19 or under

b. 20-29

c. 30-39

d. 40-49

e. 50-59

f. 60 or over

3. What is your relationship status?

a. Single

b. Married

c. Divorced/ separated

d. Widowed

e. Living with a partner but not married

f. Never married

g. Other (please specify) …….

4. What is the highest level of education you have completed?

a. Less than high school

b. High school/GED

c. Some college

d. Two-year college degree

e. 4-year college degree

f. Masters

g. Doctoral

h. Other (please specify) …….

5. What is your annual household income?

a. $ 0-12,000

b. $12,000-24,000

c. $ 24,000-40,000

d. $ 40,000-60,000

e. $ 60,000 and above

6. How would you describe your current employment status?

a. Employed full time

b. Employed part time

c. Unemployed / Looking for work

d. Retired

e. Student

f. Homemaker

g. Other (please specify) …….

7. Would you describe yourself as:

a. American Indian / Native American

b. Asian

c. Black / African American

d. Hispanic / Latino

e. White / Caucasian

f. Pacific Islander

g. Other (please specify) …….

8. Do you consider yourself to have a disability?
a. Yes. If yes, please explain ……

b. No
c. Prefer not to say

Please tell us about your children …

8. Please fill out the table below for your children. The first row is filled out as an example.

	Child's age	**Child's gender**	**Child's disability category**	**Early intervention services that the child receives**	**How long has your child been receiving early intervention services?**
1	2 years old	Boy	Autism	Attending parent toddler group 2 days a week	6 months
2					
3					
4					
5					
6					

Professional Information Form

Instructions

This is an online anonymous survey.
Your responses are to remain anonymous, PLEASE DO NOT INCLUDE YOUR NAME ANYWHERE ON THIS SURVEY. All information you provide will be kept confidential. Individual will not identify responses. All responses will be complied together and analyzed as a group.

Please answer all the questions on the following pages.
This survey will approximately take about 30 minutes to complete.
Please complete the survey within two weeks.

Your participation in this study is crucial and may have a far-reaching impact on the understanding of family-centered practices in the field of early intervention/early childhood special education.

We thank you in advance for taking the time to complete the survey.

Remember, this is completely voluntary. You can choose to be in the study or not. If you have any questions about the study, please contact Serra Acar at 919-308-2395.

Thank you for your consideration.
Sincerely,
Serra Acar
acar@uoregon.edu

Doctoral Student
Early Intervention Program
University of Oregon

1. Do you give your consent to participate in this study?
a. Yes
b. No

Please tell us about yourself…

1. What is your gender?
a. Female
b. Male
c. Decline to state

2. What is your age?
a. 19 or under
b. 20-29

c. 30-39
d. 40-49
e. 50-59
f. 60 or over
g. Decline to State

3. Would you describe yourself as:
a. American Indian / Native American
b. Asian
c. Black / African American
d. Hispanic / Latino
e. White / Caucasian
f. Pacific Islander
g. Other (please specify)

4. What is your highest level of education?
a. Masters
b. Doctor of Philosophy
c. Doctor of Education
d. Other (please specify)

5. How would you describe your current employment status?
a. Employed full time
b. Employed part time
c. Unemployed / Looking for work
d. Retired
e. Post-doctoral student
f. Other (please specify)

6. In what state do you live/ work?

7. Which one of the following categories best describes your job position or primary role?
a. Researcher
b. Faculty member
c. Parent advocate
d. Early interventionists
d. Other (Please describe)

8. What type of organization or agency do you work for?
a. College or university
b. Community-based or nonprofit organization
c. Federal special education agency
d. Education department - local/county/state
e. Private industry or business
f. Other, please specify:

9. How many years have you been working in your field? Please give your best estimate.

10. What are two main research topics related to Early Intervention/Early Childhood Special Education (EI/ECSE), that you are investigating? Please list.
1.
2.

Service Provider/ Early Interventionist Information Form

Instructions

This is an online anonymous survey.
Your answers are to remain anonymous, PLEASE DO NOT INCLUDE YOUR NAME ANYWHERE ON THIS SURVEY. All information you provide will be kept confidential.

Please answer all the questions on the following pages.
This survey will approximately take about 15-20 minutes to complete.
Please complete the survey within two weeks.

Your participation in this study is crucial and may have a far-reaching impact on the understanding of family-centered practices in the field of early intervention/early childhood special education.

Remember, this is completely voluntary. You can choose to be in the study or not. If you have any questions about the study, please contact Serra Acar at 919-308-2395.

Thank you for your consideration.
Sincerely,
Serra Acar
acar@uoregon.edu

Doctoral Student
Early Intervention Program
University of Oregon

1. Do you give your consent to participate in this study?
a. Yes
b. No

Please tell us about yourself…

1. What is your gender?
a. Female
b. Male
c. Prefer not to answer

2. What is your current age? (Select one)
a. Less than 18
b. 19 to 29
c. 30 to 39
d. 40 to 49

e. 50 or older

3. Would you describe yourself as:
a. American Indian / Native American
b. Asian
c. Black / African American
d. Hispanic / Latino
e. White / Caucasian
f. Pacific Islander
g. Other (please specify)

4. What is the highest level of education you have completed? (Select one)
a. Less than high school
b. High school diploma/GED
c. Some college credit
d. 2-year college degree
e. 4-year college degree (BA/BS)
f. Master's degree
g. Doctoral degree
h. Other, please explain:

5. How many years have you been working in the field of early intervention/early childhood special education? Please give your best estimate.

6. How would you describe your primary role in providing early intervention services? Please check all that apply.
a. Early interventionist
b. Behavior therapist
c. Autism specialist
c. Physical therapist
d. Speech therapist
e. Infant specialist
f. Social worker
g. Psychologist
h. Other, please specify

7. How do you define your workplace?
a. Urban
b. Suburban
c. Rural
d. Other (please specify)

8. Which of the following best describes the age of the children you provide early intervention services?
a. Children ages between 0 and 3
b. Children ages between 3 and 6

c. Both
d. None of the above

9. Tell us more about the children that you work with. Which of the following best describe children who are receiving services in your program? Please choose all that apply.

At risk of developmental delay
Atypical development
Developmental delays
Autism, PDD and/or Asperger Syndrome
Speech or language delays
Physical impairments
Deaf and Hard of Hearing
Visual impairment
Deaf and blind
Medically fragile (health impairment)
Other, please specify

10. Where do you provide early intervention services to children? Please check all that apply.
Early intervention classroom (e.g., parent toddler classroom)
Child's home (Parents, main caregiver's and/or legal guardians')
Regular nursery day care center
Reverse mainstream classroom
Hospital/medical facility (i.e., NICU)
Outpatient medical facility (i.e., feeding clinic)
Other, please specify

11. When you provide early intervention services, do you work with children, their families, or both?
Mostly children
Mostly families
Both children and their families

12. In what state do you work?

Content Validity Survey - Parent Version

Dear Parent/Caregiver,

Thank you for your interest in participating in the Family-centered Practices Profile study.

We want to improve family-centered practices in the early intervention/early childhood special education field.

Obtaining feedback from parents is vital to the review process. Let your voice be heard!

We would appreciate your taking the time to complete the following survey.

Your responses are voluntary and will be confidential. Responses will not be identified by individual. All responses will be compiled together and analyzed as a group.

If you have any questions or concerns, please contact Serra Acar, at 919-308-2395 or acar@uoregon.edu.

Thank you so much for your participation.

Serra Acar

Doctoral Candidate
Early Intervention Program
University of Oregon

Parent Feedback Survey

Instructions

Materials in this package

- Parent Information Form (blue form)
- Parent Feedback Survey (light green form)
- Pen/Pencil
- Self-addressed envelope (SAE) which is in the package with stamps

Directions

1. **Complete** the **Parent Information Form** (blue form)
2. **Complete** the **Parent Feedback Survey** (light green form)
3. When you are done, please **review your responses**
4. When you complete the forms, please put all of the written materials (Parent Information Form, Family-centered Practices Profile and Parent Feedback Survey) into the envelope and contact Serra Acar (acar@uoregon.edu, 919-308-2395) to submit your materials.
5. Once we receive your package, we will be able to send your gift card. Thank you!

Section I

Instructions: Read the questions below, and please **circle** the choice that ***you think*** *is most appropriate for each item.*
For the purposes of this current study the term **service provider** is being used to apply to all early childhood special education professionals who are providing services for children birth through five years of age.

Parent Feedback Survey				
Domain: Communication (Pages 1 - 3)				
	Representative	**Consistency**	**Essential**	**Suggestions for rewording the item**
1. **Service providers use people first language.**	1) Item is not representative of family-centered practice	1) Item is not consistent with the domain	1) Item is not essential	
	2) Item is somewhat representative of family-centered practice	2) Item is somewhat consistent domain	2) Item is somewhat essential	
	3) Item is representative	3) Item is consistent domain	3) Item is essential	

Section II

Are there any other family-centered practices that should be included in the Family-Centered Practices Profile?

Content Validity Survey - Professional Version

Dear Professional,

Thank you for your interest in participating in the Family-centered Practices Profile study.

We want to improve family-centered practices in the early intervention/early childhood special education field.

Obtaining feedback from professionals is vital to the review process. Let your voice be heard!

We would appreciate you completing the following survey.

Your responses are voluntary and will be confidential. Responses will not be identified by individual. All responses will be compiled together and analyzed as a group.

If you have any questions or concerns, please contact Serra Acar, at 919-308-2395 or acar@uoregon.edu.

Thank you so much for your participation.

Serra Acar

Doctoral Candidate
Early Intervention Program
University of Oregon

Section I

Instructions: Read the questions below, and please **circle** the choice that ***you think*** *is most appropriate for each item.*

For the purposes of this current study the term **service provider** is being used to apply to all early childhood special education professionals who are providing services for children birth through five years of age.

Professional Feedback Survey				
Domain: Communication				
	Representative	**Consistency**	**Essential**	**Suggestions for rewording the item**
1. **Service providers use people first language.**	1) Item is not representative of family-centered practice	1) Item is not consistent with the domain	1) Item is not essential	
	2) Item is somewhat representative of family-centered practice	2) Item is somewhat consistent domain	2) Item is somewhat essential	
	3) Item is representative	3) Item is consistent domain	3) Item is essential	

Section II

1. Are there any other family-centered practices that should be included in the Family-Centered Practices Profile?

2. Do you have any suggestions regarding the scoring of the Family-Centered Practices Profile?

Service Provider Utility Survey

Please read each question carefully. Please indicate your response to each item by circling one of the five responses to the right. If you come to any question you do not want to answer, go on to the next question. Thank you for your participation in this project!

This questionnaire consists of 7 items. For each item, you need to indicate the extent to which you "strongly agree" or "strongly disagree" with each statement. Please indicate your response to each item by circling one of the five responses to the right.

Section I

	Strongly Disagree			Strongly Agree
1. The items selected for family-centered practices are important.	1	2	3	4
2. The items were easy to understand.	1	2	3	4
3. The items of the profile were useful in my work with families.	1	2	3	4
4. Family-centered Practices Profile gave me further ideas about family-centered practices.	1	2	3	4
5. I am willing to change my classroom/program/center routine to implement these practices.	1	2	3	4
6. Carrying out these practices will fit into my classroom/program/center routine.	1	2	3	4
7. I plan to use the Family-centered Practices Profile in the future.	1	2	3	4

Section II

1. Do you have any suggestions for improvement?

Thank you for completing this questionnaire.
Your help is greatly appreciated.
Thank you again for your assistance in this important project!

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