

4-1-2015

Examining Experiences of Early Intervention Providers Serving Culturally Diverse Families: A Multiple Case Study Analysis

Wendy Lea Bradshaw
University of South Florida, wbradsha@usf.edu

Follow this and additional works at: <https://digitalcommons.usf.edu/etd>



Part of the [Special Education and Teaching Commons](#)

Scholar Commons Citation

Bradshaw, Wendy Lea, "Examining Experiences of Early Intervention Providers Serving Culturally Diverse Families: A Multiple Case Study Analysis" (2015). *USF Tampa Graduate Theses and Dissertations*.
<https://digitalcommons.usf.edu/etd/5452>

This Dissertation is brought to you for free and open access by the USF Graduate Theses and Dissertations at Digital Commons @ University of South Florida. It has been accepted for inclusion in USF Tampa Graduate Theses and Dissertations by an authorized administrator of Digital Commons @ University of South Florida. For more information, please contact digitalcommons@usf.edu.

Examining Experiences of Early Intervention Providers Serving Culturally Diverse
Families: A Multiple Case Study Analysis

by

Wendy Lea Bradshaw

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
Department of Special Education
College of Education
University of South Florida

Co-Major Professor: Patricia Alvarez McHatton, Ph.D.

Co-Major Professor: Phyllis Jones, Ph.D.

Jolyn Blank, Ph.D.

Daphne Thomas, Ph.D.

Liliana Rodriguez Campos, Ph.D.

Date of Approval:

April 1, 2015

Keywords: culturally responsive practice, early intervention, early childhood special education,
culturally diverse families, family centered practices, best practices

Copyright © 2015, Wendy Lea Bradshaw

DEDICATION

I dedicate this dissertation to all the children and families I have met along my professional journey. You have taught me lessons about perseverance, compassion, and ingenuity which I never could have learned through formal educational channels. You constantly help me experience the world anew and I am grateful for each and every one of you.

ACKNOWLEDGMENTS

I would like to thank my co-major professors, Dr. Patricia Alvarez McHatton and Dr. Phyllis Jones, for their steadfast encouragement and support during the creation and completion of this study. Their insights and thoughtful feedback were invaluable and helped me strive to excel in each stage of the process. I would also like to extend thanks to my committee members Dr. Daphne Thomas, Dr. Jolyn Blank, and Dr. Liliana Rodriguez Campos, for their continuing guidance and support throughout my doctoral program and the dissertation process. I truly appreciate the mentoring and opportunities for growth each of these highly accomplished women provided to me along my journey.

Love and heartfelt thanks go especially to Roseanne Vallice, Vicki Caruana, and Aisha Holmes, who became not only colleagues, but close friends. I shared many hours with them in deep discussion, along with much laughter and some tears. Without them, my experiences would have been so much the poorer.

I would like to thank my family and friends for being my personal cheering section throughout the doctoral program. They celebrated my accomplishments along the way, and offered shoulders and ears whenever I experienced challenges. My husband, Eric Allard, patiently ensured that I ate and slept on a semi-regular basis and served as my anchor throughout the doctoral process. My parents, Patricia and David Bradshaw, assured me that they had raised a smart, determined daughter who finished what she started. And so I did.

TABLE OF CONTENTS

List of Tables	iv
List of Figures	v
Abstract	vi
Chapter One: Introduction	1
Statement of the Problem	1
Theoretical Framework	3
Culture and Early Intervention	6
Examination of One's Own Culture	7
Knowledge of Family Culture	8
Competence in Process-Oriented Practices	8
Reflective Practice	9
Purpose of the Study	9
Research Questions	10
Methods	10
Limitations and Delimitations	12
Chapter Two: Review of Literature	13
Early Intervention Services and the Satisfaction of Culturally Diverse Families	14
Professional Preparation Experiences in Providing Culturally Responsive Services	15
Culturally Responsive Practices in Early Intervention Service Provision	17
Examining One's Own Culture	18
Acquiring Knowledge of Family Cultures	22
Building Culturally Responsive Practices	25
Reflecting and Evaluating Practices	29
Conclusion	31
Chapter Three: Methodology	33
Purpose	33
Case Study Methodology	33
Propositions	36
Participants	37
Data Collection	38
Phase One	39
Phase Two	39
Data Analysis	41

Validity	43
Credibility	46
Reporting the Findings	47
Ethics	47
Role of the Researcher	47
Chapter Four: Results and Findings	49
Context of Early Intervention Service Provision	50
Case Study Narratives	50
Case One: Rose	50
Self-assessment	51
Knowledge of own culture	51
Knowledge of cultural beliefs and practices	52
Culturally responsive practices	53
Reflective practice	55
Case Two: Barbara	55
Self-assessment	55
Knowledge of own culture	57
Knowledge of cultural beliefs and practices	58
Culturally responsive practices	58
Reflective practice	59
Case Three: Martha	60
Self-assessment	60
Knowledge of own culture	61
Knowledge of cultural beliefs and practices	62
Culturally responsive practices	64
Reflective practice	65
Case Four: Sarah Jane	66
Self-assessment	66
Knowledge of own culture	68
Knowledge of cultural beliefs and practices	68
Culturally responsive practices	69
Reflective practice	70
Case Five: Christina	71
Self-assessment	71
Knowledge of own culture	72
Knowledge of cultural beliefs and practices	73
Culturally responsive practices	74
Reflective practice	75
Case Six: Donna	76
Self-assessment	76
Knowledge of own culture	77
Knowledge of cultural beliefs and practices	77
Culturally responsive practices	79
Reflective practice	80
Data Analysis	80

First Analytical Level: Descriptive Analysis	81
Second Analytical Level: Testing Propositions	83
Summary	84
Assumption One	84
Assumption Two	84
Assumption Three	89
Assumption Four	89
Third Analytical Level: Pattern-Matching Logic	90
Summary	92
Fourth Analytical Level: Cross-Case Synthesis	93
Summary	93
Chapter Five: Implications and Significance	97
Assumption One	98
Assumption Two	100
Assumption Three	101
Assumption Four	102
Summary	105
Implications for Future Research	106
Limitations	107
Reflection on Methodology	108
Role of the Researcher	108
References	110
Appendices	121
Appendix A: Expert Review of Propositions	122
Appendix B: Case Study Protocol	131
Appendix C: Promoting Cultural and Linguistic Competency Checklist	136
Appendix D: Structured Interview Questions	143
Appendix E: Correlation of Questionnaire Items and Interview Questions with Research Based Propositions	145
Appendix F: Interview Rating Scale	146
Appendix G: Pattern-Matching Logic	150
Appendix H: Family Survey	152
Appendix I: Results of Inter-Rater Reliability	153
Appendix J: Institutional Review Board Approval	154

LIST OF TABLES

Table 1: Search Findings by Database	18
Table 2: Skilled Dialogue Strategies	27
Table 3: Theoretical Propositions Developed for Case Study Analysis	36
Table 4: Correlation of Propositions to Questionnaire Items and Interview Questions	40
Table 5: Approaches to Validity	43
Table 6: Barbara's B or C Questionnaire Responses	56
Table 7: Sara Jane's B or C Questionnaire Responses	67
Table 8: Results of Promoting Cultural & Linguistic Competency Self-Assessment Questionnaire	82
Table 9: Questionnaire Items with Multiple B and C responses	82
Table 10: Results from Proposition Testing	85
Table 11: Results of Pattern-Matching Logic	91

LIST OF FIGURES

Figure 1: Mitzel's Model	4
Figure 2: Bronfenbrenner's Ecological Systems Model.	6
Figure 3: Chain of Evidence for this Case Study	45
Figure 4: Cross-Case Synthesis	94

ABSTRACT

The cultural and linguistic diversity of the United States is growing rapidly and early intervention service providers are very likely to work with families whose cultures differ from their own. Service providers must consider the multiple cultural factors of families which contribute to family dynamics and the potential for miscommunication is high when the cultural frameworks of early intervention providers differ from those of the families they serve. Culturally responsive practices have been put forth in the theoretical literature as a way to increase successful communication and service provision but there is limited research investigating the beliefs, experiences, and practices of early intervention providers regarding cultural responsiveness and the efficacy of specific practices.

This study utilized an exploratory case study methodology with multiple case analyses to investigate the expressed beliefs and practices of in-service early intervention providers regarding culturally responsive practices and comparing them to the tenets of best practice set forth in the conceptual literature. Specifically, the study tested the theory that cultural responsiveness is an integral component of effective early intervention service provision.

CHAPTER ONE:

INTRODUCTION

Statement of the Problem

As the population of the United States continues to grow, so does the need for early intervention (EI) services for children born with or at risk of developing a disability. Early intervention services are an entitlement guaranteed to families of children aged birth to two years who qualify through Part C of the Individuals with Disabilities Educational Improvement Act of 2004 (IDEIA) (Bruder, 2010; Turnbull, Turnbull, Erwin, Soodak, & Shogren, 2011). According to Part C, EI services should be family centered and are ideally provided in the natural environment of families, which includes all the settings where families would typically carry out their life activities (i.e. homes, faith based settings, community common areas). These services are aimed at enhancing the capacity of the family to support developmental gains in the infant or toddler (Crais, Roy, & Free, 2006) and focus on the entire family as a unit in delivering support and services for infants and toddlers with developmental delays or identified disabilities (Bruder, 2010; Dunst, 2009; Turnbull et al., 2011).

Over the past decade, the number of children receiving early intervention has increased over 70% with more than 300,000 children served in 2012 alone (Lazara, Danaher, & Goode, 2013). Concurrently, the cultural and linguistic diversity of the U.S. population is also increasing, with the Census Bureau estimating that by the year 2030 at least 40% of the U.S. population will be comprised of people from a variety of non-Caucasian backgrounds (Day, 1996). However, the cultural and linguistic diversity of students enrolling in professional early

intervention preparation programs is not growing at a proportional rate, and some research indicates it is declining (Bowman & Stott, 1994; Hanson & Lynch, 2013). In a recent national study of early childhood preparation programs, including programs which prepared students to work with young children with disabilities, half or more of students across degree programs identified as White, non-Hispanic (Maxwell, Lim, & Early, 2006). Students identifying as Black, non-Hispanic accounted for between 11% and 23% of students, while students identifying as Hispanic made up approximately 10% of student enrollment across degree categories. Although current demographic data is not available for families served through Part C, it stands to reason that EI service providers are very likely to work with families whose cultures differ from their own (Coleman, 2009; Durand, 2008; Lynch & Hanson, 2011; Madding, 2000).

In order to communicate and collaborate effectively with families, EI service providers must consider multiple cultural factors which influence the daily lives of families and contribute to the family dynamic, including ethnic background, family structure, spiritual beliefs, socioeconomic status, and level of education (DEC, 2002; Lynch & Hanson, 2011; Turnbull et al., 2011). However, the potential for miscommunication is high when the cultural frameworks of EI providers differ from those of the families they serve (Harry, 2008; Lynch & Hanson, 2011). One explanation for this miscommunication is that many service providers have inadequate preparation in working effectively with families whose cultures differ from theirs (Harry, 2008; Jackson, Leacox, & Callender, 2010). There is evidence that many EI providers may not recognize the importance of, or feel unsure about how to provide culturally responsive services to families from cultures different than their own (Lee, Ostrosky, Bennett, & Fowler, 2003; Harry, 2002; Kummerer, 2012). Service providers have reported lack of time and/or training in implementation of culturally responsive practices (Lee et al., 2003; Kummerer, 2012)

and while providers generally agree that culturally responsive practices are important, reported use of these practices is significantly lower (Lee et al., 2003). This evidence corroborates long standing concerns about limited understanding and use of culturally responsive strategies by EI providers (Harry, 2002; Kalyanpur & Harry, 1997).

While there is a robust conceptual literature base addressing links between cultural responsiveness and efficacious early intervention, there is limited research investigating the beliefs, experiences, and practices of EI providers regarding cultural responsiveness (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004; Lee et al., 2003) and the efficacy of specific practices (Smith, Strain, Snyder, Sandall, & McLean, 2002). Increasing federal and state demands for empirical support of early intervention practices (Hebbeler, Barton, & Mallik, 2008; Smith et al., 2002) underscore the need to determine specifically which culturally responsive practices are supported by positive child and family outcomes. To this end, the proposed study aims to investigate how effective EI providers define, learn, and enact culturally responsive practices in the context of family centered services.

Theoretical Framework

This study is grounded in Mitzel's (1960) model of variables influencing change and also draws from Ecological Systems Theory, which emphasizes child development in the context of the environments in which the child participates (Bronfenbrenner, 1979; Brooks-Gunn, 1995). While Mitzel's work focused primarily on teachers, his model also lends itself to the exploration of variables in early intervention which affect child and family outcomes (Cruickshank, 1985). There are four types of variables in Mitzel's model (Figure 1): context variables, presage variables, process variables, and product variables (Dunkin & Biddle, 1974). Context variables are those variables that arise from the unique environmental factors and individual differences

possessed by families. Presage variables refer to characteristics of the service providers themselves, such as personality traits, professional training, values, and beliefs. Process variables refer to the behaviors of the service providers in action, such as methods of communication and interaction with families. Product variables can be thought of as the changes that occur within children and families (child and family outcomes) as a result of the context, presage, and process variables to which they were exposed. The primary goal of early intervention is to facilitate positive child and family outcomes which are a product of multiple variables influencing change.

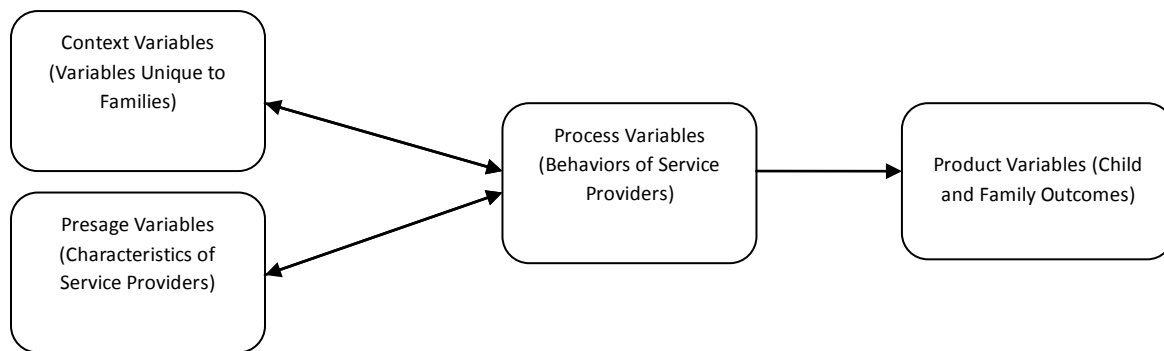


Figure 1. Mitzel's Model

As shown in Figure 1, both context variables and presage variables affect process variables and vice versa, which in turn have an effect on product variables (Dunkin & Biddle, 1974). In this study, the variables of interest are those presage and process variables which are related to culturally responsive practice in the early intervention conceptual literature. Early intervention providers who experience positive child and family outcomes when working with families who differ from them culturally should theoretically possess knowledge of and demonstrate these identified culturally responsive practices.

To make full use of Mitzel's model, it must be considered in conjunction with the Ecological Systems Theory which has shaped current research and practices in early intervention (Odom & Wolery, 2003). Early intervention services originated as a response to needs identified by physicians, and typically adhered to a medical model of deficit identification and therapeutic intervention in a controlled clinical environment with a professional for a prescribed number of hours per week (McWilliam, 2000). However, psychological and sociological findings suggest this model frequently does not produce optimal outcomes as it is patient (child) centered and not responsive to the specific contexts of the environment in which the child lives (Dunst, Hamby, Trivette, Raab, & Bruder, 2000; McWilliam, 2000). Scholars in the field of early intervention recognized these limitations and addressed them through contextually sensitive theories which could bridge the divide between clinic and home environment, such as Ecological Systems Theory (Brooks-Gunn, 1995; McWilliam, 2000). This theory posits that the driving force behind early intervention is the family, and effects of intervention result from changes in the contexts of the family (Brooks-Gunn, 1995). Changes brought about by early intervention originate in the mesosystem, one of five environmental systems identified by Bronfenbrenner (1979) which interact to influence the contexts of the family and the development of children (Figure 2). The mesosystem represents interactions between two other systems, the microsystem and the exosystem. The microsystem includes all of the variables with which the child interacts, while the exosystem includes variables which indirectly affect child development but do not interact directly with the child. The macrosystem consists of the culture(s) in which the child and family live, including societal rules and procedures, political contexts, and dominant ideologies. The chronosystem refers to the effects of time, including sociohistorical circumstances and transitions over the course of an individual's life (Bronfenbrenner, 1992). While the process of early

intervention occurs within the mesosystem, variables from all of the systems may influence the early intervention services, including those related to cultural values and beliefs. The early intervention literature base draws attention to the importance of these cultural variables in service provision, outlining legislation, concerns, and recommended practices in order to positively impact product variables.

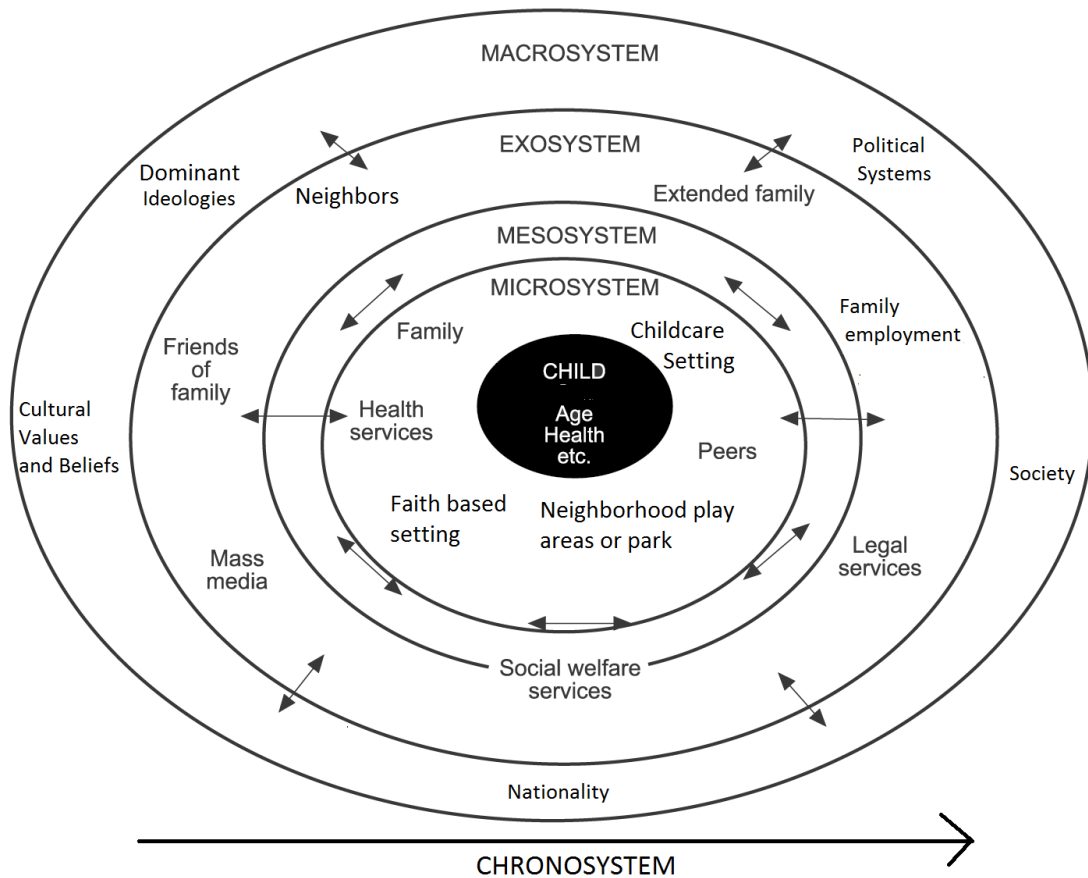


Figure 2. Bronfenbrenner's Ecological Systems Model. (Adapted from Dockrell, 1999, p. 139.)

Culture and Early Intervention

One of the most significant components of EI legislation is the mandating of family-centered service provision (Bruder, 2010) which underscores the importance of the family in

supporting child development and emphasizes the family as decision makers regarding EI services (Crais, Roy, & Free, 2006). This type of service provision is associated with higher levels of family well-being and family empowerment (Boyd, Dunst, Hamby, & Trivette, 1995; Dunst, Trivette, & Hamby, 2007), compared to prior service delivery models which emphasized professional expertise. Studies of families who have received family centered service provision indicate this model also leads to more positive child developmental outcomes (Dempsey & Keen, 2008). However, several researchers have raised the concern that service providers may not achieve the same level of positive outcomes when working with families who have cultural beliefs differing from their own (Harry, 2002; Withrow, 2008). These concerns led to the identification of culturally responsive practices which are designed to bridge these differences and enable service providers to work effectively with all families (Lynch & Hanson, 2011).

Culture encompasses the beliefs, traditions, activities, and practices that may be shared by members of a community (Rogoff, 2003). A person's culture can be thought of as their worldview that helps them make sense of what they know (Kalyanpur & Harry, 1997). In a diverse society, such as the United States, EI providers are often expected to work with families from multiple cultural groups outside of their own (Lynch & Hanson, 2011). Culturally responsive practices have been put forth as a way to minimize conflicts stemming from cultural differences and enable providers and families to collaborate and communicate more effectively (Lynch & Hanson, 2011). Several studies have reported more positive child and family outcomes (Boyd et al., 1995; Dunst et al., 2007; Turnbull et al. 2011) and higher ratings of family satisfaction with services (Boyd et al., 1995; Dunst et al., 2007) when services are provided in a culturally responsive manner. These practices can be grouped into four general principles, discussed below.

Examination of One's Own Culture

Multiple scholars support the idea that an individual's own culture plays into their professional perceptions and practices (Durand, 2008; Rogoff, 2003). Professionals working closely with families need to be aware that their own cultural beliefs and practices may not apply to all families (Rogoff, 2003; Turnbull et al., 2011). Thus, it is important for EI service providers to explicitly identify the values and beliefs that make up their own cultural views, and to recognize that they represent only one of many frameworks through which actions and events can be interpreted (Kalyanpur & Harry, 1997). Some areas for self-examination include beliefs about the etiology of disability, typical age ranges for reaching developmental milestones, as well as family roles and functioning, and perception of acceptable behaviors (Bradshaw, 2013; Rogoff, 2003).

Knowledge of Family Culture

In addition to having personal cultural self-awareness, culturally responsive service providers are believed to have knowledge of the cultural beliefs and practices valued by the families they serve (Lynch & Hanson, 2011; Puig, 2010; Spicer, 2010). While developing an encyclopedic knowledge of all cultural groups is not feasible, culturally responsible providers are expected to demonstrate interest in learning about the cultures of the families they serve and incorporate this knowledge into service provision (Lynch & Hanson, 2011; Puig, 2010). Culturally responsive providers are also aware of intracultural differences among families with similar cultural characteristics, and do not assume that families subscribe to traditional cultural beliefs and practices (Lynch & Hanson, 2011; Harry, 2002). These providers make an effort to understand and value cultural beliefs and practices which are outside of those of the mainstream or dominant culture (Harry, 2002).

Competence in Process-Oriented Practices

In order to effectively use knowledge regarding personal and family cultural beliefs in service provision, culturally responsive service providers need to have knowledge and skills in practices that bridge the differences between cultures (Kalyanpur & Harry, 1997). Practices such as cultural reciprocity (Kalyanpur & Harry, 1997) and Skilled Dialogue (Barrera & Kramer, 2009) engage the provider and family in a mutually respectful relationship which accepts and explicates personal cultural differences while providing space for new and unique solutions to challenges. Utilization of these and other process-oriented culturally responsive practices enable providers to tailor services to the unique strengths and challenges of each family (Lynch & Hanson, 2011).

Reflective Practice

Multiple scholars have posited that culturally responsive service providers actively reflect upon their practice through a process requiring consistent introspection and subsequent adjustments (Barrera & Kramer, 2009; Stroud, 2010). The reflective process may involve several components, including reflection sessions with peers, guided reflective supervision sessions with a facilitator, and reflective journaling (Parlakian, 2001; Stroud, 2010). Culturally responsive practitioners assign importance to continuous self-assessment and make time for reflection on a regular basis (Barrera & Kramer, 2009; Stroud, 2010), as they ascribe to the idea of the professional as a life-long learner.

Purpose of the Study

Although there is conceptual literature addressing the need for culturally responsive early intervention service provision for effective service provision, as well as best practices to fulfill this need, there is limited research investigating the knowledge and usage of these practices by

effective early intervention providers. The current demand for evidence based practices highlights this gap in the research base regarding effective culturally responsive practices in early intervention (Blue-Banning et al., 2004; Lee et al., 2003; Smith et al., 2002). This study aimed to address the gap by investigating the expressed beliefs and practices of in-service early intervention providers regarding culturally responsive practices and comparing them to the tenets of best practice set forth in the conceptual literature, thereby testing the theory that cultural responsiveness is an integral component of effective EI service provision.

Research Questions

1. How do early intervention providers define, learn, and express usage of culturally competent practices?
2. To what extent do their beliefs and self-reported behaviors support high-quality culturally responsive practices indicated in the literature?

Methods

The impact of cultural responsiveness on EI service provision involves complex social phenomena which were best approached through the use of exploratory case study (Yin, 2009). The case study methodology is uniquely suited for addressing exploratory questions pertaining to contemporary events set within a real-life framework which the researcher has very little control over (Yin, 2009). Furthermore, case study attempts to illuminate a decision or set of decisions, why they were taken, how they were implemented, and to what result(s) (Yin, 2009). Yin's (2009) framework for conducting and analyzing multiple cases specifically addresses generalizing findings to support or refute theoretical and conceptual ideas put forth in the literature, strongly aligning with the proposed aims of this study.

Yin (2009) recommends the development of research-based propositions to define the scope of a study. Propositions are statements acquired directly from research that are tested through analysis of data collected during the study. In this study, four critical skill areas for early intervention providers have been identified in the literature and formed the basis of the propositions to be tested with early intervention providers using Yin's Case Study framework and analysis (2009). These are:

1. Examination of one's own culture in recognition of how a provider's own culture plays into their professional perceptions and practices (Harry, 1992; Rogoff, 2003);
2. Acquisition of knowledge of the cultural beliefs and practices valued by the families they serve (Lynch & Hanson, 2011; Puig, 2010; Withrow, 2008);
3. Competence in process-oriented practices that bridge the differences between cultures (Kalyanpur & Harry, 1997; Barrera & Kramer, 2009); and
4. Engaging in a reflective process that requires consistent introspection and adjustments (Barrera & Kramer, 2009; Parlakian, 2001; Stroud, 2010).

In order to delve into the research questions with appropriate depth, and in accordance with Yin's (2009) framework, six service providers identified as effective with culturally diverse families participated in this multiple case study analysis. Possible participants were identified by the administrator of an early intervention organization serving a mix of urban and rural counties in the Southeast United States, through review of organizational data collected on provider effectiveness. This study collected data through the use of a questionnaire and individual interviews focusing on the practices of participants with families who differ from them culturally. This data was examined through multiple levels of analysis described in depth in Chapter 3.

Limitations and Delimitations

This study had several limitations. It drew from a small sample of EI service providers who all practice in the same geographic area in a southeastern state. Although the pool of possible participants was selected by third parties with psychometric evaluation data, I was acquainted with three of the participants due to my own practice as an EI provider in the state. Possible bias was addressed by using member checks and external reviewers throughout data collection and analysis. Furthermore, this study relied on data collected concerning expressed practices which may differ from enacted practices. Delimitations included not addressing EI service providers who work in center-based or medical settings or providers who did not meet the criteria for highly qualified designated by the researcher. Chapter 2 provides a review of the literature pertinent to this study.

CHAPTER TWO:

REVIEW OF LITERATURE

Early Intervention (EI) services have been long recognized as a critical factor in improving the educational and life outcomes of infants and toddlers (birth through age 2) with developmental delays and/or disabilities (Bruder, 2010). To be optimally effective, it is postulated these services must be provided by professionals who are competent in recognizing and responding to the cultural context(s) within which families conduct their day-to-day lives (Harry, 2008; Lynch & Hanson, 2011). When the cultural contexts of professionals and families are similar, their underlying values and beliefs are often analogous, increasing the chance of service and support provision in harmony with family contexts, and thus more likely to lead to positive family and child outcomes. However, when the cultural frameworks of EI providers and families differ, the potential for miscommunication between providers and families is increased, which in turn can decrease the effectiveness of services and supports (Harry, 2008; Lynch & Hanson, 2011; Turnbull, 2007). Researchers have proposed this miscommunication may stem from inadequate provider preparation in working effectively with culturally and linguistically diverse families (Harry, 2008; Jackson, Leacox, & Callender, 2010; Wu, 2009).

Correspondingly, some data exist which suggests family satisfaction with services is lower when families do not identify with the dominant Euro-normative culture (e.g. Bailey, Scarborough, Hebbeler, Spiker, & Mallik, 2004; Wu, 2009; Zahr, 2000). To address this issue, scholars and professional organizations strongly recommend EI providers engage in culturally responsive service provision. These services emphasize respect for cultural differences and a

willingness to learn, and acceptance of different ways of viewing the world (DeGangi, Wietlisbach, Poisson, Steir, & Royeen, 1994; Kalyanpur & Harry, 1997; Lynch & Hanson, 2004). Conceptual literature over the past few decades has recommended knowledge and skills to build and maintain culturally responsive service provision, but there is a general lack of empirical support for these assertions (Sylva, 2005; Fults, 2011). This gap in the literature may be a result of the difficulty in conducting studies which can isolate a specific practice among the multiple variables present in the varying social contexts within which EI services are provided.

Notwithstanding, the increasing demand for empirical support of provider practices (Bruder, 2010; Smith et al., 2002) illuminates the critical need for studies supporting culturally responsive practices identified by the conceptual literature. This study aims to contribute to the empirical base by testing the assertions found in the literature base. This chapter will first provide an overview of data related to culturally diverse families receiving EI services and provider preparation, and then provide a review of the literature associated with culturally responsive EI practices.

Early Intervention Services and the Satisfaction of Culturally Diverse Families

Data from families participating in EI services strongly suggest culture is a component in satisfaction with services and outcomes. The National Early Intervention Longitudinal Study (NEILS) of families receiving EI services (n=2586) found families with cultural characteristics differing from the Euro-normative dominant culture (e.g. ethnicity, race, and low income levels) were over two times as likely to be dissatisfied with services and report less positive outcomes than Caucasian families and families at higher income levels (Bailey et al., 2004). Zahr (2000) conducted a longitudinal study of home-based early intervention services provided to 123 Latino families, and found that increased services led to decreased positive outcomes, with the most

positive outcomes reported for families receiving the least amount of services. Zahr hypothesized that unsolicited extra help provided by ‘professionals’ may have actually decreased family confidence in their parenting abilities.

The findings described above are buttressed by a study conducted by Bailey and colleagues (1999) investigating whether family cultural values and beliefs influenced the satisfaction of Hispanic parents of young children receiving early intervention services. Findings indicated these families felt their cultural values, beliefs, language, and needs did not receive sufficient consideration in the development of Individualized Family Service Plans. Similarly, Mendez-Perez (2000) interviewed seven Mexican-American mothers who received early intervention services for their children’s language delays, and found the mothers reported feeling disconnected from the intervention program and did not agree with the types of activities suggested by the practitioners to increase their children’s communication skills. Wu (2009) reported similar findings with four Chinese American mothers receiving EI services through providers from non-Chinese cultural backgrounds. Wu found that the mothers experienced frustration in that providers did not communicate effectively with them, explain their methods satisfactorily, or convey adequate information about available supports and services. This evidence corroborates long standing concerns about limited understanding and use of culturally responsive strategies by EI providers (Harry, 2008; Kalyanpur & Harry, 1998).

Professional Preparation Experiences in Providing Culturally Responsive Services

Available evidence suggests that many EI providers have had limited professional preparation opportunities to develop knowledge and skills related to culturally responsive service provision (Harry, 2008; Kummerer, 2012; Lee et al., 2003; Xu, 2007). In a survey of 123 EI providers in a Midwestern metropolitan area, Lee and colleagues (2003) found that 42% of the

participants (n=52) had not attended professional development regarding cultural sensitivity in the prior 5 years. Furthermore, respondents who reported barriers to culturally appropriate practices often cited lack of training as a primary barrier in acquiring culture specific knowledge (36%, n=34), reflecting on own culture and culture of families (58%, n= 35), and implementing culturally appropriate family involvement and service delivery (34%, n=23). A later study conducted with 76 EI providers and utilizing the same survey found that only one-third (n=29) of providers reported receiving cultural sensitivity training (Lee, Zhang, & Schwartz, 2006). Another study focusing on 13 speech-language pathologists working with culturally and linguistically diverse young children and their families found more than half (n=7) reported having little to no professional preparation specific to cultural and linguistic diversity (Jackson et al., 2010).

A larger Michigan based study explored the perceptions of preparation experiences of 189 speech-language pathologist practitioners in the field of early intervention in Michigan, while simultaneously surveying program representatives for 10 graduate speech-language preparation programs in and surrounding Michigan (Caesar, 2013). The majority of practitioner participants reported working with ethnically, racially, and linguistically diverse families (70% served Black/African American clients, 49% served Hispanic/Latino clients, 43% served Spanish speaking clients, 12% served Asian American clients, and 7% served Pacific Islander clients). Although program representatives all strongly or somewhat agreed that their programs provided adequate academic instruction in cultural and linguistic diversity, less than half (45%) of practitioners indicated they received adequate theoretical preparation. This discrepancy in perceptions was also demonstrated by a majority (83%) of program representatives asserting that they strongly or somewhat agreed that their programs provided sufficient practicum experience

with culturally and linguistically diverse (CLD) populations, while only 26% of practitioners felt their programs provided them with adequate practical experiences involving these populations. For the most part, participants reported being able to supplement their knowledge and skills through in-service professional preparation experiences, with a majority of practitioner participants (61%) reporting strongly or somewhat agreeing there were enough continuing education opportunities available to meet their needs in serving CLD families.

These collective findings combine with strong support from scholars, professional organizations, and legislation underscoring the importance of cultural responsiveness as a factor in effective EI service provision (Harry, 2002; Lynch & Hanson, 2011). However, statements of support for culturally responsive EI are often provided in a broad manner and do not elucidate specific culturally responsive practices or provide evidence as to the effectiveness of these practices. To address this gap in the literature base, a review of the literature specific to recommended culturally responsive practices and their effectiveness was conducted.

Culturally Responsive Practices in Early Intervention Service Provision

An initial review of the literature was conducted using variations and combinations of the key words “culture” and “early intervention”. These search terms were selected to broadly identify literature across the multiple fields of study concerned with culturally responsive early intervention services. Results were then limited to those books, articles and studies specifically referring to family-centered EI services provided in the natural environment under Part C, to exclude literature which focused on other interpretations of the term early intervention (e.g. early reading intervention, early intervention for children of low socioeconomic status, clinic based intervention). This pool of literature was further limited to studies and articles which pertained to culturally responsive knowledge and practices for EI service providers.

Table 1

Search Findings by Database

Database	Initial Results of Key Word Search	Results Referring to Family Centered Part C Services
JStor	406	19
Education FullText	111	13
ProQuest Dissertations and Theses Full Text	115	2
PsychInfo	488	21

Once results were combined to eliminate duplicate findings, 27 sources remained. Four overarching principles of culturally responsive practice emerged from these sources, consistent with a framework for cultural responsiveness developed by the researcher and grounded in a prior review of the literature in this area (Bradshaw, 2013). These four principles are: (1) Examining One’s Own Culture; (2) Acquiring Knowledge of Family Cultures, (3) Building Culturally Responsive Practices, and (4) Reflecting and Evaluating Practices. Each of these is discussed below.

Examining One’s Own Culture

The first principle of culturally responsive service provision focuses on the culture of the provider, specifically his or her recognition of how their own culture affects their professional perceptions and practices (Lynch & Hanson, 2011; Gardener & French, 2011). Culturally responsive service providers are aware of the relativity of the cultural lens through which they interpret actions and events in the world and are able to articulate their cultural beliefs and practices (Harry, 1992; Kalyampur & Harry, 1997; Paul & Roth, 2011). These providers do not assume their cultural beliefs and practices are correct and applicable to all children and realize

they are only one of many ways in which a child may be raised (Harry, 2002; Lynch & Hanson, 2011). This process was defined by Bowers (1984) as the *relativizing* of culture, in which individuals explicitly question their tacitly held beliefs.

Building upon Bowers' work, Harry (1992) identified and described five areas of cultural assumptions in which early childhood educators and early intervention providers should examine their own beliefs in the context of their service provision. These five areas of self-examination have been reiterated and reinforced in the literature since initial publication, and include (1) the meanings attached to a diagnosis of disability; (2) concepts of family structure and family identity; (3) goals of early childhood education; (4) concepts of appropriate parent-child interaction; and (5) communication styles between professionals and family members. Each is defined in more detail below.

The first area of self-examination is concerned with the meanings of disability and individual beliefs about the range considered 'normal' for child development, beliefs about the etiology of developmental delays and disabilities, and beliefs about correcting and accepting 'abnormal' behaviors (Harry, 1992; Gardiner & French, 2011; Paul & Roth, 2011). In addition to personal cultural factors, EI providers should attend to how their professional preparation experiences have shaped their beliefs (Harry, 1992; Kalyanpur & Harry, 1997; Spicer, 2010). The framework of services for persons with disabilities in the United States, and thus professional preparation of many early interventionists is traditionally grounded in the assumption that a delay or disability reflects an intrinsic deficit to be remediated (Harry, 1992; Harry, 2008). Professional guidelines in early childhood special education, which many preparation programs use for guidance, have only recently begun to explicate the cultural underpinnings of commonly recognized developmental norms (Goldstein, 2008; Rogoff, 2003).

Therefore, many providers may not have had exposure to the cultural implications of commonly accepted developmental milestones during their preparation experiences.

The second area of cultural self-examination focuses on concepts of family structure and family identity views about what constitutes a family, including roles of family responsibility and authority, how enmeshed or disengaged family members should be with each other (Harry, 1992; Gardiner & French, 2011), and degree of emphasis placed on children developing independence or interdependence (Paul & Roth, 2011).

The third area of cultural self-examination is closely related to beliefs about family and focuses on beliefs about parenting style and what comprises good parenting (Harry, 1992; Gardiner & French, 2011). Cultural values and beliefs have been found to impact family expectations, discipline strategies, and physical and verbal interaction styles with children (Lynch & Hanson, 2011; Harry, 1992; Heath, 1983; Rogoff, 2003). Accepted disciplinary styles may vary widely across cultures, as do the norms for which nuclear or extended family members take responsibility for disciplining children (Lynch & Hanson, 2011; Harry, 1992).

The fourth area of cultural self-examination pertains to one's beliefs about the purposes and goals of early intervention. Professional preparation in designing goals for early intervention have traditionally been situated within a model which aimed to remediate deficits in children identified through assessment measures grounded in middle class, European American developmental norms (Harry, 1992; 2008). The shift to family centered practices over the past few decades has emphasized the importance of families taking the role of primary decision maker in setting goals for EI outcomes which focus on the family as a whole (Dunst, 2002; Turnbull et al., 2011). Notwithstanding, there are still concerns that a 'therapist as expert' view may lead to families acquiescing to therapist-suggested child-centered goals, even if they do not

accurately reflect family concerns and needs (Lynch & Hanson, 2011; Lawlor & Mattingly, 1998; MacKean, Thurston, & Scott, 2005; Wilcox & Woods, 2011). Providers should reflect on their beliefs about the purpose and goals of EI and recognize that they are culturally situated, and therefore not universally applicable to all families receiving their services (Harry, 1992; Sylva, 2005)

The fifth area of self-examination recommended for EI professionals centers on one's communication styles and views of professional roles. Styles of interaction are multifaceted and vary by culture (Harry, 1992; Lynch & Hanson, 2011; Rogoff, 2003). Harry (1992) identified two central assumptions which EI providers in the United States may take for granted; use of a low-context communication style and adherence to an ideal of professionalism. According to Hall (1977), communication styles vary by culture and fall along a continuum of 'low-context' to 'high-context'. Low-context communication is depersonalized, focuses on specific topics following discrete linear tangents, and relies predominantly on spoken language and precise description to relay messages. High-context communication utilizes more non-verbal and affective messages, and inherently acknowledges the interconnectedness of contexts and accepts ambiguity and tangential relationships as part of communication. Harry (1992) emphasized that EI providers should recognize their own communication style in order to reduce miscommunication with families who use differing communication styles. Assumptions about the role of a professional may further influence how EI providers interact with the families whom they serve (Harry, 1992). In the U.S., the concept of professionalism encourages establishing boundaries between professionals and clients which discourage the sharing of non-essential personal information and coming directly to the point during meetings.

As part of a larger study exploring the perspectives of EI providers towards culturally responsive practices, Lee and colleagues (2003) found that African American and Hispanic/Latino providers reported examining their own cultural beliefs, values, and opinions significantly more often than their European American counterparts. A more recent study was conducted in Nova Scotia, Canada, where early intervention service definitions and provision requirements are similar to those in the United States. Gardiner and French (2011) investigated the perceptions of ten early intervention providers and eleven early intervention center directors regarding culturally sensitive service provision through use of a survey and individual interviews. Nine of the eleven centers included in the study were reported to serve multiple culturally diverse families, with a range of one family served to 27 families served ($\bar{x}=6$). Only one provider out of the 21 participants mentioned self-awareness of her own culture as an important component of culturally sensitive practice, and none of the participants verbalized the importance of considering their cultural views just one way of interpreting the world.

Acquiring Knowledge of Family Cultures

Family-centered EI services are grounded in the belief that infants and toddlers with developmental delays and/or disabilities are best served when their families are involved as active decision makers and when services are provided in harmony with families' beliefs and values (Dunst, Trivette, & Hamby, 2007; Lynch & Hanson, 2011). In order to effectively identify, develop, and provide help-giving services which meet the needs of families, service providers need to acquire knowledge of the cultural beliefs and practices valued by the families they serve (Lynch & Hanson, 2011; Puig, 2010).

The literature base calls particular attention to the importance of learning the context in which individual families understand disability, as cross-cultural research indicates beliefs about

the etiology of disability differ among cultural groups (Harry, 1992; Harry, 2008; Lynch & Hanson, 2011). For example, some Asian and Hispanic cultural groups believe that disability may have supernatural causes as a retribution or reward for past actions (Harry, 2002; Glover & Blankenship, 2007; Withrow, 2008), although this belief has been reported less frequently in recent years, possibly due to the dynamic nature of culture and acculturation (Glover & Blankenship, 2007). Glover and Blankenship (2007) conducted a study investigating the extent to which Mexican and Mexican American participants (n=160) believed God caused or cured disability. Approximately one quarter of participants reported that they believed disability was sometimes a moral test from God.

Culture also plays a role in the way families conceptualize disability (Olivos, Gallagher, & Aguilar, 2010; Rogoff, 2003). Cultural groups vary widely in expectations and beliefs for developmental milestones, and emphasize different skills and behaviors. While European-American families often encourage children to converse with adults and peers, many Native American families value listening, silence, and restraint in young children (Culp & McCarthick, 1997; Rogoff, 2003). In a study of 24 adolescent mothers, Culp and McCarthick (1997) found that Native American mothers (n=16) demonstrated fewer verbal initiations and spontaneous conversation with their children than their White (n=7) counterparts (n=8). A study of 32 European American and 28 Puerto Rican families found Puerto Rican infants spent more time than European American infants in multiparty interactions, as opposed to one-on-one interactions (Feng, Harwood, Leyendecker, & Miller, 2001). Puerto Rican mothers were also more likely to continue feeding infants as they got older as compared to European American mothers who encouraged self-feeding. In a study of Chinese American families receiving EI services, Wu (2009) also drew attention to the cultural nature of feeding practices. In many Chinese-American

families adults do not teach children self-feeding until a later age than some other cultures partially due to the difficulty of self-feeding many traditional foods which make up their diet.

Cultural beliefs about disability also influence how families attribute responsibility for and respond to misbehavior (Spicer, 2010; Withrow, 2008). For example, some Hispanic cultural groups do not believe that young children can control their emotions, and young children with disabilities are not held responsible for behavior perceived as disability-related (Withrow, 2008). In a 2009 survey of parents of infants and toddlers identifying as White, African American, and Hispanic, Spicer (2009) found that African American participants did not place as much emphasis on setting routines and talking about feelings as White and Hispanic participants. African American and Hispanic participants were also more likely to value young children being able to sit still and pay attention than White participants. A technical report reviewing culturally and linguistically sensitive practices in EI for motor skill development found that cultural differences affected how caregivers interacted with children in three ways (Baghwanji, Milagros Santos, & Fowler, 2000). Culture impacted how caregivers encouraged infants to learn and practice specific body movements and postures, emphasized the attainment of certain milestones over others, and the level to which they optimized the comfort level of children, such as minimizing crying (Baghwanji et al., 2000). If not addressed by service providers, these and other differences in cultural practices may cause challenges in EI provision (Baghwanji et al., 2000; Jackson, Leacox, & Callendar, 2010; Withrow, 2008). Jackson and colleagues (2010) conducted a study of 13 speech language pathologists working with young linguistically diverse children and their families. They found that some participants reported experiencing challenges when families had different child-rearing practices (69%, n=9) and used different communication styles (23%, n=3) with their children.

However, multiple scholars have cautioned against making stereotypical assumptions based on a family's cultural factors, as cultural beliefs cannot be assumed based on membership in a single cultural category (Harry, 2002; Lynch & Hanson, 2011). For example, Darling and Gallagher (2004) conducted a survey study examining the alignment between purported needs and supports provided to 120 caregivers of young children with disabilities. Participant responses were analyzed based on membership in racial (African American/European American) and geographical (rural/urban) categories. Findings indicated that African American participants reported different needs overall than their European American counterparts, but also that needs differed between African American families living in rural and urban areas.

Many cultural factors contribute to the unique strengths and needs of families, including socioeconomic status, language, nationality, ethnicity, race, geographical location, spiritual beliefs, age, and professional or personal interest group membership (Harry, 2002; Lynch & Hanson, 2011; Puig, 2012). Respectful open communication with families is an oft suggested way for providers to obtain knowledge about what is expected from their children at different ages and stages of development (Barrera & Kramer, 2009; Kalyanpur & Harry, 1999; Lynch & Hanson, 2011).

Building Culturally Responsive Practices

In order to ensure provision of culturally responsive practices, there have been multiple calls for EI providers to build culturally responsive practices into their professional repertoire (e.g. Kalyanpur & Harry, 1997; Lynch & Hanson, 2011; Sylva, 2005). A commonly suggested way to accomplish this is for providers to become competent in process-oriented practices that bridge the differences between cultures of providers and families (Barrera & Kramer, 2009; Kalyanpur & Harry, 1997; Lynch & Hanson, 2011; Turnbull et al., 2011). Espe-Sherwindt

(2008) asserted that EI providers seeking to provide culturally responsive services must establish a trusting relationship with families involving the conscious use of processes and practices which emphasize families as decision-makers and change agents. One such process is cultural reciprocity, which provides a frame within which providers may approach their interactions with families (Kalyanpur & Harry, 1997). There are four guidelines for engaging in cultural reciprocity: (1) recognize cultural values embedded in professional interpretations and suggestions; (2) establish if the family values these interpretations and suggestions or in what ways their views differ; (3) acknowledge identified differences and explain the basis of the professional interpretations and suggestions; (4) collaborate with the family to adapt interpretations and suggestions to honor the values of the family (Kalyanpur & Harry, 1997).

Barrera & Kramer (2009) offer another process oriented approach to building culturally responsive practice which they termed Skilled Dialogue, placing heavy emphasis on the ideas of honoring identity, voice, and connection. Skilled Dialogue encourages the practitioner to be proactive and develop agency in challenging interactions, while honoring the beliefs and values of all participants. Three interconnected elements make up this framework: qualities, dispositions, and strategies. The qualities of respect, reciprocity, and responsiveness are defined in terms of honoring identity, voice, and connection, respectively. These qualities are manifested through the dispositions and strategies in the framework. For example, the quality of respect, defined as honoring individual identities, carries the overarching theme that “differences do not make people wrong” (p. 34). Two strategies are provided for each framework quality, each tied to a framework disposition, as shown in Table 2.

Table 2

Skilled Dialogue Strategies

Strategy	Purpose	What it looks like
Welcoming	To intentionally connect with another as someone of equal dignity and purpose	Welcoming statements (i.e. "I am glad we could have this meeting.") -Affirming comments (i.e. "It sounds like you have really thought about this.") -General inquiring statements (i.e. "How has your week been?")
Allowing	To create an inclusive context for integration of diverse perspectives	-Refraining from offering solutions prematurely -Not interrupting (i.e. attentive listening) -Acknowledging other's perspective without defending own ("I see why you feel that way.")
Sense-Making	To discover how behaviors, beliefs, and perspectives make sense within a context	-Direct and indirect questions -Obtaining details (i.e. "Tell me more.") -Checking for understanding (i.e. "So am I hearing you say ... Is that right?")
Appreciating	To identify the positive aspects of another's behavior that we can learn from	-Reframing to appreciate function of behaviors found challenging -Identifying 'gold nuggets' in behavior (i.e. refusal to comply is capacity of self-assertion) -Comments valuing other's behaviors/beliefs (i.e. "I never thought of it that way.")
Joining	To identify connections between another's perspectives/behaviors/beliefs and one's own	-Acknowledging connection between behaviors (i.e. "I see we're both concerned about this.") -Acknowledge that our behavior is contributing to an identified problem -Stating how both behaviors complement each other (i.e. "When you give Lyn snacks throughout the day, it is helping her work on the goal of feeding herself independently")
Harmonizing	To create a more inclusive context in which contradiction can complement each other to generate a 'third choice'	-Willingness to reframe perceptions -Openness to brainstorming (i.e. "Can we think of another option?") -Identification of options that unite both perspectives (i.e. "Can we put both these ideas together?")

Recognition and utilization of culturally protective factors is another way in which EI providers can build their cultural competence (Mogro-Wilson, 2011; Withrow, 2008). Culturally protective factors are factors present in a cultural group that may increase the resiliency of

families receiving EI services (Mogro-Wilson, 2011; Withrow, 2008). Mogro-Wilson (2011) outlined four domains of protective mechanisms for Latino families which can assist service providers in engaging with and providing more effective EI services to families from Latino backgrounds. These domains are cultural resiliency, community resiliency, family resiliency, and individual resiliency.

According to Mogro-Wilson (2011), cultural resiliency refers to shared cultural identity, values, and traditions which may buffer against negative outcomes. One of these values is *simpatia*, which stresses empathy and non-confrontational interactions, while another is collectivism, requiring *simpatia* and emphasizing the interdependence of family and community members over individual goals and achievements. Community resiliency refers to the tendency of many Latino families to participate as part of a larger community in religious and secular interactions. Community members often provide support for each other, such as maternal support groups described by Withrow (2008) comprised of mothers and grandmothers in a community following the birth of a child. Family resiliency includes characteristics such as loyalty, respect, solidarity, and interdependence among nuclear and extended family members, which may reduce overall family stress (Mogro-Wilson, 2011; Withrow, 2008). Latino families often make decisions which best promote the stability entire family system, and may not place a strong emphasis on independent functioning as European-American families (Withrow, 2008). Individual resiliency refers to valued traits inherent in individuals, including competence, temperament, and self-esteem. Mogro-Wilson cautions that families may become offended if EI providers focus on disability above other traits and characteristics of the child, or if providers suggest changes in family member interactions without first acknowledging positive traits and practices. By recognizing culturally protective factors, EI providers may be able to build them

into services, increasing the likelihood of culturally appropriate and successful service provision (Mogro-Wilson, 2011; Withrow, 2008).

Reflecting and Evaluating Practices

Scholars including Lynch and Hanson (2011) and Barrera and Kramer (2009) emphasize that culturally responsive service provision is a recursive process that requires regular introspection and adjustments to practice. They and others in the conceptual literature frequently encourage EI providers to engage in continuous reflection and seek feedback from families and colleagues after interactions in order to evaluate the effectiveness of their interactions and practices (e.g. Gatti, Watson, & Siegel, 2011; Sandall et al., 2005; Spicer, 2010; Turnbull et al., 2011). The Division for Early Childhood (DEC) of the Council for Exceptional Children has included reflection as a recommended practice for EI providers and defines reflection as “systematic and ongoing review, critical analysis, application, and synthesis of knowledge, skills, and dispositions specific to working with children birth through 5 with disabilities/developmental delays and their families” (Sandall et al., 2005, p. 210).

Gatti and colleagues (2011) emphasize the primacy of relationships in learning and development and assert that reflective practice is always shared and cannot be accomplished alone. Supporting this assertion is a study of 170 EI providers in a Southern state (Sexton, Lobman, Constans, Snyder, & Ernest, 1997). Participants were surveyed regarding their perceptions of the cultural appropriateness and success of their practice with African American families. There was a significant difference between the self-ratings of the European American and African American participants, in that European American EI providers rated their interactions with African American families more positively than their African American colleagues. The researchers posited that cultural empathy may have enabled the African

American participants to reflect more accurately upon their accomplishments with African American families. Findings such as these underscore the importance of EI providers holding reflective practice meetings with a trusted facilitator and peers, during which group members critically examine their practice and ask for interpretations and suggestions from peers. Ideally, this group would include providers from diverse cultural groups and professional backgrounds, allowing the group members to draw from a broad range of expertise and multiple viewpoints (Stroud, 2010).

Stroud (2010) describes a similar format of reflective practice, where providers work in a dyadic pair with a supervisor or coach. These meetings are intended to provide support and knowledge to guide EI providers in decision making, help explore reactions to encountered situations, and assist in managing the stress and intensity of working with families (Eggbeer, Mann, & Seibel, 2007; Gatti et al., 2011; Stroud, 2010). Gatti and colleagues (2011) maintain that utilization of parallel process during meetings is essential to reflective practice. Parallel process is comprised of three elements: (1) the facilitator acknowledges feelings associated with the situation and interactions being reflected upon; (2) the facilitator brings attention to the strengths of the relationships between the EI provider and family, and between caregiver and child; (3) the facilitator and provider use open-ended questions to explore the situation and next steps together, as opposed to the provider receiving directives from an ‘expert’. This type of professional interaction offers EI providers support similar to that which they provide to families and assists them in problem-solving challenges they encounter in their practice with families (Gatti et al., 2011).

Conclusion

Family centered service provision is the mandated mode of delivery for EI services in the United States and culture plays a large role in all components of the EI process (Harry, 2008; Turnbull et al., 2011). Given the changing demographics across the nation, it is very likely that EI providers will work with families of a different culture of their own (Coleman, 2009; Hanson & Lynch, 2013; Madding, 2000). However, evidence suggests that many service providers experience challenges in providing family centered practices when their culture does not match that of the families they are serving (Harry, 1992; Harry, 2008; Lynch & Hanson, 2011). Furthermore, families receiving EI services who differ from the Euro-normative dominant culture are more likely to be dissatisfied with EI services and outcomes (Bailey, Scarborough, Hebbeler, Spiker, & Mallik, 2004; Wu, 2009; Zahr, 2000). Scholars have suggested several types of culturally responsive processes and practices which may bridge differences in EI provider and client cultures. These can be subsumed under four overarching principles: (1) Examining One's Own Culture; (2) Acquiring Knowledge of Family Cultures, (3) Building Culturally Responsive Practices, and (4) Reflecting and Evaluating Practices (Bradshaw, 2013). These principles form the foundation of the assumptions and propositions guiding this study, which will be explored in Chapter 3.

Several limitations were encountered in collecting and reviewing the literature for this study. First, the literature base concerning culturally responsive processes and practices is overwhelmingly conceptual and provides very limited empirical support (Blue-Banning et al., 2004; Lee et al., 2003; Smith et al., 2002). Another limitation of the literature is small sample sizes among most of the empirical studies which do exist, which makes generalizations about the effectiveness of practices difficult. Furthermore, the literature base spans several fields of study,

as EI service providers come from multiple disciplines, each with their own terminology, professional journals, and professional guidelines for family-centered and culturally responsive practice, increasing the difficulty in generalization due to contextual differences in service provision. This study will contribute to the field of research by providing greater insight into the experiences, beliefs, and behaviors of EI providers relative to working with families who differ from them culturally. By acquiring knowledge from a select group of EI providers identified as effective, this study may assist EI organizations and provider preparation programs with information on how they may better prepare EI service providers to work with culturally diverse families. Chapter Three provides a detailed description of this study's methodology, data collection process, and data analysis procedures.

CHAPTER THREE:

METHODOLOGY

Purpose

The purpose of this study was to investigate the expressed beliefs and practices of in-service early intervention providers regarding culturally responsive practices and compare them against tenets of best practice set forth in the conceptual literature, thereby testing the theory that cultural responsiveness is an integral component of effective EI service provision. The research questions that guided this study are:

1. How do early intervention providers define, learn, and express usage of culturally responsive practices?
2. To what extent do their beliefs and self-reported behaviors support high-quality culturally responsive practices indicated in the literature?

This study contributed to the field of research by providing greater insight into the knowledge and usage of culturally responsive practices by effective EI providers. The results may inform future development of culturally responsive educational curricula for preservice and in-service EI providers.

Case Study Methodology

The use of culturally responsive practices involves complex processes and interactions between EI service providers, their preservice and in-service preparation experiences, and families receiving EI services. Given the multiple contextual variables underlying the research questions, a method needed to be chosen which would be uniquely suited to the context-bound

phenomena under investigation, and which would enable the researcher to test and make generalizations to theory. As such, this study employed the case study methodology, specifically a multiple-case replication design guided by the work of Yin (2009). Case study has been an oft used research methodology in recent years due to its suitability for answering ‘how’ and ‘why’ questions about complex phenomena not easily addressed through purely quantitative methods (Strauss & Glaser, 1967, Yin, 2009). Although reports on the origins of case study are conflicting, multiple sources agree that it came into prominence in the early twentieth century and has been used extensively in the social sciences to investigate questions not easily addressed through use of traditional quantitative methods (Mills, Durepos, & Wiebe, 2010; Tellis, 1997). While case study was first used as an alternative to quantitative methods of research, criticism within the field of sociology resulted in the widespread acceptance of quantitative measures in case study methodology, resulting in a mixed-method approach to inquiry (Stake, 1995; Tellis, 1997). Several different approaches to case study methodology have developed as researchers in multiple fields have adopted case study for their investigative purposes. The research questions at hand lent themselves in particular to Yin’s approach, as his methodology provides a systematic procedure for conducting a credible and trustworthy case study which enables the researcher to generalize findings to theory (Yin, 2009).

Yin (2003) defines a case study as an “empirical inquiry that (a) investigates a contemporary phenomenon within a real-life context, especially when (b) the boundaries between phenomenon and context are not clearly evident” (p.13). He delineates between three types of case study, identified by purpose. An exploratory case study is used as initial research attempting to identify patterns in data and create a model through which to make sense of the data, while a descriptive case study focuses on particular features of an issue and requires a

theory to guide data collection pertaining to those features (Yin, 1994; Yin, 2009). An explanatory case study, such as this one, tries to analyze or explain why or how something happens (Yin, 1994; Yin, 2009).

According to Yin (2009) there are five critical components in the design of a case study (a) the research question(s); (b) its propositions, if any; (c) the unit of analysis; (d) the logic linking the data to the propositions; (e) the criteria for interpreting the findings. The form of the research question(s) should guide the researcher to the most relevant method of investigation; which in this instance is case study. Once case study has been selected as the most appropriate method, the researcher may develop propositions from the extant literature pertaining to the research questions. These propositions are theoretical and conceptual statements drawn directly from the research literature which are tested throughout the study (Yin, 2009). The research questions and propositions guide the selection of the unit(s) of analysis. The unit of analysis, also considered an individual case, is the individual or phenomena being studied (Yin, 2009). Since evidence from multiple cases is often more compelling and considered more robust, Yin recommends following a replication design consisting of six to ten cases. Each case must be chosen to either (a) predict similar results (*literal replication*) or (b) predict contrasting results for anticipated reasons (*theoretical replication*). In order to choose these cases, the researcher must develop a theoretical framework, or logic for linking the data to the propositions, which states the conditions under which a particular phenomenon is likely or unlikely to be found. From this framework the researcher may interpret the findings. If most or all of the selected cases fulfill predictions, it can be considered compelling evidence supporting the propositions. However, if the cases provide contradictory evidence, the researcher will need to revise the propositions and test them with another set of cases (Yin, 2009).

Propositions

Following Yin's approach to case study research, theoretical propositions were developed by culling the existing research and conceptual literature pertaining to culturally responsive best practices in family centered service provision contexts. To this end, an extensive review of the literature was conducted spanning the fields of mental health, pediatrics, and early childhood education, as well as speech, physical, and occupational therapy (See Chapter 2). Each proposition represents a significant theoretical or conceptual assumption found in the literature base (Yin, 2009). The propositions were then reviewed by a panel of experts with scholarly expertise in early childhood special education and cultural responsiveness. The propositions were revised and finalized based on the experts' feedback and comments (Appendix A). These propositions, listed in Table 3, guided the data collection and enabled the researcher to generalize to theory, unlike more traditional methodologies which generalize to subjects in a population.

Table 3

Theoretical Propositions Developed for Case Study Analysis

Propositions: Culturally Responsive Early Intervention Service Providers

Assumption 1: Culturally responsive early intervention service providers have examined their own culture.

1.1. Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, professional roles, and acceptable behaviors.

1.2. Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted, and can articulate ways in which frameworks may differ.

Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.

2.1 Providers demonstrate interest in learning about the cultures of families they serve and incorporate the knowledge into the design and delivery of service provision.

Table 3 (continued)

2.2 Providers can identify intracultural differences among families with similar cultural backgrounds and do not assume that families subscribe to beliefs and practices.
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.
Assumption 3: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.
3.1 Providers strengthen their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.
3.3 Providers acknowledge any identified differences and explain the basis of their professional interpretations and suggestions.
3.4 Providers collaborate with families and other professionals to adapt interpretations and suggestions to honor the values of the family.
3.5 Providers recognize and utilize the culturally-based protective factors possessed by families receiving EI services.
Assumption 4: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.
4.1 Providers engage in reflection on a regular basis.
4.2 Providers seek feedback from families and colleagues following interactions.
4.3 Providers routinely engage in self-assessment.
4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.
4.5 Providers believe that professionals should be lifelong learners and seek out new learning opportunities.

Participants

Participants were recruited and purposively selected from a pool of early intervention service providers currently practicing in a limited geographic area in the southeastern United States. This area serves culturally and linguistically diverse families living in rural, suburban, and urban areas encompassed within three large counties. These counties are further divided into zones which contain a mixed population according to the above factors. Zones are assigned to early intervention organizations and providers within the organizations must be prepared to serve any families qualifying for early intervention within their zones. Providers are assigned families

based on available openings in their caseload for their zones as reported monthly to the state early intervention organization. If families are dissatisfied with their early intervention provider, they may request a different provider in their zone and their state assigned service coordinator will match them to another provider with available openings.

A pool of potential participants were selected by two early intervention organization executive officers and referred to the study based on knowledge and evidence of their past success with culturally and linguistically diverse families. This success was determined by past performance reviews, including history of family satisfaction with services and Individualized Family Service Plan goal completion levels of at least 80% determined by the organizations, as the state in which this study took place does not collect data pertaining to these success markers. A high level of family satisfaction with services was measured by an aggregate score of 3 or above on family responses to returned surveys generated by the state early intervention organization and given to families receiving EI services each year (located in Appendix H). These surveys ask six positively worded questions about their interactions with the service provider with possible responses of 1-Strongly Disagree, 2-Disagree, 3-Agree, and 4-Strongly Agree for each. Families are asked to complete and return the survey anonymously to the early intervention organization with an enclosed postage paid envelope. Data is not available on the rate of return of surveys. Fourteen providers met the criteria and were invited by the researcher to take part in the study via email. Six participants responded affirmatively and were selected for the cases.

Data Collection

A case study protocol (see Appendix B) was developed to direct data collection. This protocol prepared the researcher to collect data within the scope of the study (Yin, 2009). Per

Yin's design, the protocol included a synopsis of the study, case study questions, field procedures, and a guide for the case report. Data was collected in two phases.

Phase 1

In the first phase, participants were asked to complete an online questionnaire consisting of 23 items excerpted from a Promoting Cultural & Linguistic Competency self-assessment checklist (Goode, 1989/2009). This checklist was created and disseminated by the National Center for Cultural Competence to heighten the awareness and sensitivity of early childhood personnel to the importance of cultural and linguistic diversity and cultural competence in early childhood intervention (Goode, 1989/2009). The checklist was modified for this study in two ways. First, the self-assessment checklist was excerpted in order to select those items pertaining to early intervention service providers working in the natural environment and excluding items which referred to center-based intervention settings, as they did not pertain to this study. Second, space was made to allow participants to give descriptive written responses for individual items to provide a richer understanding of their responses, as the checklist only provides for a discrete response to each item. The questionnaire also collected demographic information on participants, including gender, years of EI practice, racial and ethnic identification, and educational background in order to assist in descriptive analysis and cross-case comparison.

Phase 2

The second phase of data collection consisted of individual structured interviews with participants. After receiving data from Phase I, an individual interview was conducted with each participant. The purpose of these interviews was to address the four principles and corresponding propositions by exploring successes and challenges participants have experienced when providing early intervention services to families who differ from them culturally and/or

linguistically. Questions also addressed educational/learning experiences which prepared them to serve culturally and linguistically diverse families. The interviews were conducted at a time and place convenient to the participants. Interviews were audio-recorded by the researcher and field notes were taken during interviews. Both the questionnaire (Appendix C) and structured interview protocol (Appendix D) correlated to the research-developed propositions, as shown in Table 4 as well as Appendix E.

Table 4

Correlation of Propositions to Questionnaire Items and Interview Questions

Proposition	Questionnaire Item(s)	Interview Question(s)
1.1	28	10, 11
1.2	28, 33-46	11, 13
2.1	16, 17, 19, 47, 49	5, 7, 8, 9, 13
2.2	30, 33-36, 38-46	7, 8, 9
2.3	16, 17, 19, 34-36, 38-46	2, 5, 7, 8, 9, 15, 16
3.1	19, 20, 21, 25, 28	1, 3, 8, 9, 11, 12, 15
3.2	25, 28	3, 4, 8, 15, 16
3.3	25, 28	3, 4, 11, 12, 13, 16
3.4	17, 25, 28	1, 2, 3, 6, 15, 16
3.5	17, 25, 28	3, 8, 9, 15
4.1	-	3, 4, 6, 9, 13, 17
4.2	-	4, 6, 13, 15, 17
4.3	-	6, 13, 17
4.4	-	6, 13, 15, 17
4.5	16	2, 5, 6, 13, 14, 17

Two levels of member checks were conducted in the form of 1) participant review of interview transcripts; and 2) participant review of case study narratives. Participants were given the opportunity to give feedback regarding data accuracy and provide an opportunity for document revision if warranted. To further ensure the integrity of the study, a database of all data collected is maintained in a secure location. This database serves as a chain of evidence for both

the researcher and external reviewers to trace the steps taken in the case study, per Yin's (2009) guidelines for conducting a credible and trustworthy case study.

Data Analysis

The unit of analysis in this study was an early intervention provider deemed highly effective at working with families and the case to be studied is the same individual. Four levels of analysis were conducted in this study, encompassing both within-case case and cross-case analyses (Yin, 2009). In the first analytic level the researcher conducted a descriptive analysis of data collected from participant questionnaire responses. The questionnaire items had three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or never, or statement applies to me to minimal degree or not at all. All items were positively worded, so an 'A' response indicated a high usage of a specific culturally responsive practice, while a 'C' response indicated minimal to no use of the practice. In addition to these responses, participants were provided with a comment field for each item within which they may expand upon their response. Responses were reviewed to determine if they supported or negated correlated propositions, as seen in Table 4 and to enrich the case narratives for each participant.

The second level of analysis consisted of review of interview transcripts by the researcher in order to determine if participant responses supported or negated the propositions and overarching assumptions. Participant responses were matched to individual propositions and analyzed through use of an interview rating scale which can be found in Appendix F (Duchnowski, Kutash, & Oliveira, 2004). Responses were rated on a seven point scale, ranging from +3 (strong support for proposition) to -3 (strong opposition to proposition), with 0 indicating data neither supported nor negated the propositions. Following the tally of individual

proposition ratings, scores were aggregated gain an overall picture of support for each of the four overarching assumptions in each case. The first assumption had two propositions with a potential rating range of -6 (strong opposition to assumption) to +6 (strong support for assumption). Likewise, the second assumption encompassed four propositions and potential ratings range from -12 to +12, while the third and fourth assumptions each contained five propositions and had potential ratings of -15 to +15.

In the third analytical level, the researcher utilized pattern-matching logic to compare the questionnaire and interview findings with those predicted by the research-based assumptions and corresponding propositions. Pattern matching logic is used in comparisons of empirically based patterns to theoretically predicted patterns and contributes to the internal validity of a study (Yin, 2009). The researcher used the interview rating scale (Appendix F) as a guide to compare participant responses to the propositions in order to (a) determine if there were patterns related to cultural responsiveness in the practices of effective family-centered early intervention providers, and (b) to build a rich description of the experiences of these providers.

The fourth analytical level consisted of a cross-case synthesis of the data, as recommended by Yin (2009) for multiple case studies. The replication approach for multiple case studies treats each individual case as a whole study, as demonstrated by the three initial levels of analysis for this study. Each case's conclusions were then treated as the data needing replication by the other cases (Yin, 2009). Both the individual cases and the cross-case synthesis were critical components of testing the propositions and increasing the robustness of the results (Yin, 2009). A uniform framework, utilizing word tables, was designed enabling the researcher to array the data collected from the individual cases for identification of similar and disparate features across cases (Yin, 2009).

Validity

Validity is of the upmost concern to the researcher and was addressed throughout the study. As a type of empirical social research, the case study methodology is subject to four tests of validity (Tellis, 1997; Yin, 1994). These types, with a brief description and approach for dealing with each, are illustrated in Table 5.

Table 5

Approaches to Validity

Test	Description	Study Phase(s)	Approach
Construct Validity	The degree to which legitimate inferences can be made as to an operationalized construct of interest through use of selected data collection measures	Design Data Collection Data Analysis Data Reporting	-Literature review -Multiple sources of evidence -Chain of evidence -Expert review of draft case report
External Validity	The degree to which findings are generalizable	Data Analysis Data Reporting	-Cross-case synthesis -Addressing rival explanations -Generalize to theory
Internal Validity	The degree to which participants feel they are accurately represented through data collection and reporting measures	Data Collection Data Reporting	-Pattern matching -Member checks
Reliability	The degree to which data collection and analysis procedures are conducted in a consistent and stable manner	Data Collection Data Analysis	-Use case study protocol -External review of data -Case study database

In order to ensure the reliability of the findings, several procedures were employed. First, the researcher employed member checks following data collection, as previously described. The researcher trained and utilized an external reviewer with experience in the field of early childhood special education and case study methodology to independently rate the data from the individual cases, to ensure an acceptable level ($\geq 80\%$) of inter-coder agreement in determining the strength of evidence gathered for each of the propositions through use of the interview rating scale (Appendix F). The external reviewer had access to all materials necessary to conduct an independent analysis, including Appendix E, which linked the individual propositions to the data sources. The researcher and external reviewer coded the selected data independently and then met to discuss the codes they had assigned. Coding resulted in 98% agreement overall, with a rate of agreement of 100% for the propositions subsumed under the first and fourth assumptions, a rate of agreement of 94% for the propositions falling under the second assumption, and a rate of agreement of 97% for the propositions corresponding with the third assumption. If an acceptable level of agreement had not been achieved, the external reviewer and researcher would have met to determine discrepancies in ratings and discuss disputed data until consensus is reached.

A significant measure in maintaining the validity of this study was through creation of a chain of evidence, including a case study database (Yin, 2009). Using this chain of evidence, independent researchers should be able to follow the phases of the study, utilize the data collected, and follow the same analysis procedures found in the case study to arrive at analogous conclusions. The components which comprised the chain of evidence for this study are illustrated in Figure 3.

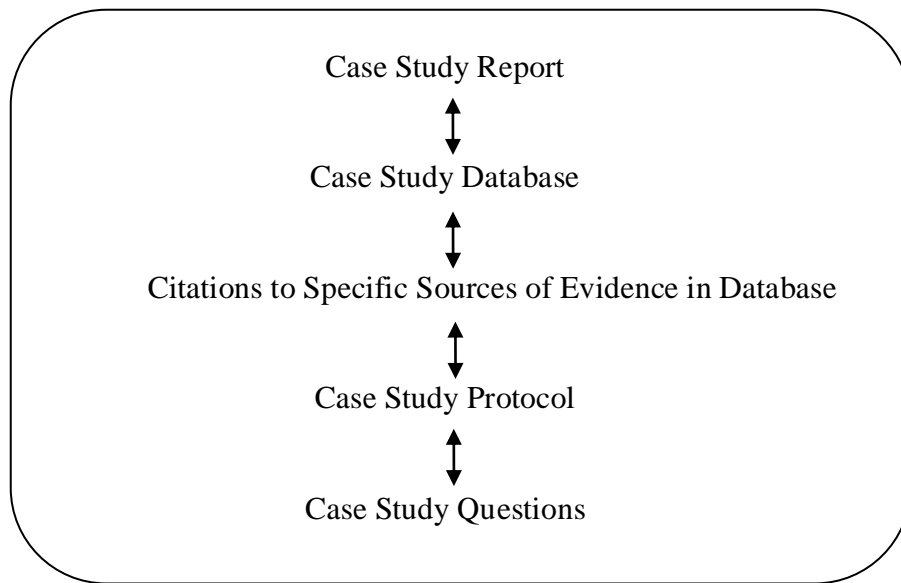


Figure 3. Chain of Evidence for this Case Study

The following threats to validity have been identified and addressed:

- Experimental mortality-in the event that selected participants choose to drop out of the study, secondary participants from the initial participant pool would be invited to participate to ensure a total of at least six cases.
- Social desirability bias-since this study relies on self-report, there was a chance that participants would respond in ways which they perceive as more desirable. The initial questionnaire was administered electronically, which McBurney (1994) suggests limits the effects of this bias by providing a stronger feeling of neutrality than even a highly skilled interviewer. Participants were reassured of the confidentiality of their participation prior to beginning individual interviews, and questions were worded in a manner which avoided a dichotomous right/wrong answer construct.

Credibility

To preserve the credibility, trustworthiness, and usefulness of case study Yin (2009) describes five criteria that must be present:

1. The case study must be significant-unusual and of interest to the field; the underlying issues are important to the field.
2. The case study must be complete-the boundaries are explicitly attended to; demonstrates the researcher collected all possible relevant evidence; and is absent of limitations bound by time or resources.
3. The case study must consider alternative perspectives-it must seek serious alternatives and show the basis on which they might be rejected.
4. The case study must display sufficient evidence-it must present the most relevant evidence for the audience to reach independent conclusions; it must present adequate evidence that the researcher knows the area of inquiry and all cases were treated fairly and with an effort to avoid bias.
5. The case study must be composed in an engaging manner-presentation must be clear and interesting; reports must attend to narrative structure and draw the reader in.

In order to consider this study credible, the researcher needed to particularly mindful of demonstrating how this study meets the above guidelines. The first criterion has been met, as the study is significant, given the dearth of empirical literature exploring culturally responsive practices in early intervention contexts. The second, third, and fourth criteria were met through attention to the reliability and validity of the study, as described previously and shown in Table 5 above. The fifth criterion was met through expert review of the draft case report.

Reporting the Findings

A written case study report is used to report the findings from this study. As suggested by Yin (2009), a guiding format for this report is included in the case study protocol (Appendix A). The report was developed utilizing the collected data and researcher field notes, and included the four levels of data analysis as well as individual case study narratives for each participant. Each participant was given an opportunity to review their individual narrative to identify possible discrepancies before report finalization. If discrepancies had occurred, the researcher and participant would have navigated any perceived inaccuracies to ensure narratives were representative of participant and experiences. A draft of the report in its entirety was reviewed by an expert in the field of early childhood special education, who also has research experience in Yin's case study methodology.

Ethics

Internal Review Board (IRB) approval was secured prior to the start of research. Signed consent forms were obtained prior to the collection of data, and participants were informed during each phase of the study that they could leave the study at any time they wished. Data collected will remain confidential, and no personally identifying participant information was or will be shared with reviewers. Data will remain stored in a secure location at all times known only to the researcher for seven years, upon which time it will be destroyed, according to College and IRB guidelines.

Role of the Researcher

In the process of developing this study, I drew from my experience as an early intervention provider to select data collection methods which best suited the contexts of early intervention being provided under Part C of IDEA in the natural environment, under a particular

state's interpretations. I believe my familiarity with the roles and contexts of early intervention providers enhanced the study by allowing me to probe more delicately into the experiences of participants. However, to guard against potential bias stemming from my personal experiences, several precautions were taken. Structured interviews allowed me time to consider how to avoid questions which might be construed as leading the participant. Member checks and external reviews were utilized throughout the data collection and analysis phases.

CHAPTER FOUR:

RESULTS AND FINDINGS

This research study employed the case study methodology with a multiple-case replication design case (Yin, 2009) in order to investigate the expressed beliefs and practices of in-service early intervention providers regarding culturally responsive practices. This study then compared findings against tenets of best practice set forth in the conceptual literature to test the theory that cultural responsiveness is an integral component of effective EI service provision. The six participants selected for this study were highly effective early intervention providers currently practicing in the southeastern United States. Two organizations providing early intervention were contacted by the researcher and agreed to provide an email contact list of highly effective providers with whom they contracted services. The criteria used to define highly effective was two-fold and based on the most recent annual performance evaluation data. Providers must have demonstrated completion levels of at least 80 percent for the Individualized Family Service Plan (IFSP) goals they were signed onto. Providers must also have shown a history of family satisfaction with services as determined by an aggregate rating of 3 or above overall on returned family quality assurance surveys (Appendix H) provided by the state administering organization of early intervention services. These data were collected and maintained by the early intervention organizations themselves, as the state does not currently collect data on either measure. An email requesting participation was sent by the researcher to the 14 early intervention providers who met these criteria. Seven out of the 14 providers

responded to this initial email; however, one interested provider did not respond to two follow-up emails for the study, resulting in six total participants who served as the case studies.

This chapter is presented in five sections. The first section provides an overview of the context of the participants, while the second presents the six individual case study narratives. The third details the findings specific to the assumptions and propositions which were tested. The fourth section lists the findings from the pattern matching logic, while the fifth and final section reports the results from the cross case synthesis.

Context of Early Intervention Service Provision

All six participants provide early intervention services in the central area of a Southeastern state comprised of three counties with a mix of rural, suburban, and urban areas. All participants provided these services in the natural environment of the families, most frequently in the family's home, although two providers reported serving children in community settings such as child care facilities and a community multi-purpose building. Two providers also reported serving homeless families in motels and at the homes of friends and relatives. The participants are individually employed by one of two organizations which contract with the local area administrator of the state EI organization to provide services. The participants' caseloads varied widely, with one provider stating she served six families and another served over thirty, with services ranging from one hour per month per family to twice weekly per family.

Case Study Narratives

Case One: Rose

Rose is an amicable European-American woman in her late thirties who is quick to laugh and share an anecdote. She provides early intervention services as a speech-language pathologist. She obtained a Master's degree in Speech-Language Pathology at a state university

in the South Central United States. Rose has been providing early intervention services for 16 years and currently directs an early intervention organization with ten contracted employees including herself.

Self-assessment. Rose completed an online questionnaire including 23 items from the Promoting Cultural and Linguistic Competency Checklist (Appendix C), which is a self-assessment checklist for professionals providing services and supports in early intervention and early childhood settings (Goode, 2009). The questionnaire items have three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or never, or statement applies to me to minimal degree or not at all. All items are positively worded, so an ‘A’ response indicates a high usage of a specific culturally responsive practice, while a ‘C’ response indicates minimal to no use of the practice. Rose gave a response of ‘A’ for all items, suggesting she uses multiple and varied culturally responsive practices in providing services and supports to culturally and linguistically diverse families.

Knowledge of own culture. Rose initially took a few moments to think when asked to describe major components of her own culture. She then stated that she highly valued her family and friends and that her “cultural framework” was strongly impacted by her middle class socioeconomic status and level of education. She further explicated that her cultural beliefs about raising children placed a strong emphasis on hygiene and cleanliness as well as preferred child activities such as sports and service organizations. She laughed while relating, “I never let my kids watch TV when they were little, I don’t know if that is part of my culture exactly or just who I am.” Rose also mentioned that she grew up in a diverse community and contrasted this with her experiences at a central southern state university which she said was “not very diverse”

and related that it was “shocking” to her when she “learned at that time that [how she grew up] was not how most of the world works.”

Rose often contrasted her cultural views with her knowledge of those of the families she serves, commenting “my value systems are very different than a lot of the families that I work with.” She gave examples of how these frameworks differed, including “feeding kids by hand much longer than what I’m used to,” different behavioral expectations and discipline strategies, and customs during different religious celebrations such as “fasting during the Eid.” The Eid is holiday of breaking fast following a month of dawn to sunset fasting during Ramadan in the Muslim faith. Rose shared that she believed open communication was the key to navigating differences in cultural views and that she tries “to be very upfront about oh, well that’s different than what I’m used to, can you tell me more about that, without being judgy.”

Knowledge of cultural beliefs and practices. When asked to describe the families she works with, Rose became very animated. She explains that over the course of her practice she has worked with many different types of families varying across socioeconomic status, ethnicity and race, family size, and immigration status. She commented that “overall I think most families just want what’s best for their child and they just have different background knowledge and information about how to get there.” Once she is aware of cultural differences, she tries to seek out information that may help her serve the family better. She related that she has “taken a lot of courses in cultural competence, and read a lot of books” but usually learned about the cultures of different families by asking the family directly as differences between the family’s culture and her own became apparent. She also mentioned utilizing her coworkers as resources, explaining “so if I get a family that’s Columbian I’ll go ask [coworker] for tips on how to use the right vocabulary in Spanish.”

Rose emphasized the importance of considering each family individually within their cultural contexts and specified, “I can’t make a judgment just based on their culture or nationality or what I see, I have to ask and get to them and get to know their routines to understand how that influences everything.” She reaffirmed this when telling about working with a Muslim family who had feeding concerns for their toddler. The family was fasting and Rose was not sure of how this would affect her use of strategies involving food. Rose explained, “I don’t know unless I ask and its different depending on the family, it’s not like you get the same answer from every family that’s celebrating Ramadan.” She related her frustration with the administration of some standardized measures of development, saying “In my Indian family they don’t eat with forks, right, they eat with the hands so it’s like why is that kid not using spoons and I said because they don’t use them so why do we have to force the spoon if that’s not their thing? So we can mark off that bubble? We just mark that one out because it’s not expected culturally.”

Rose also shared how she has been challenged in trying to honor some families’ beliefs about discipline while being a mandated child abuse reporter. She spoke of “helping them understand the boundaries and what is considered not just culturally acceptable here, but we live in the state of [state] and what is reportable because they are welcoming me into their home but I’m still a mandatory reporter so I do try to have those conversations and empower them with tools other than spanking and whipping.” She emphasized the importance of learning from the families and building “some trust and relationship there, especially if there are cultural differences, I need to understand where they’re coming from.”

Culturally responsive practices. Rose called attention to the importance of consistently focusing on the primary goal of early intervention, increasing the capacity of families to meet the

needs of their child through self-advocacy, when she stated, “at the end of the day it’s still about I’m trying to empower that mom to help her child, or that grandma or whoever is there.” She shared that during initial visits she works with families to develop goals for early intervention by asking the families what their concerns are and sharing her professional knowledge. Rose specified that the goal setting process is “based on what the family wants, but if the family does not know what is typical of child development at the certain ages then I try to educate them, give them information about it.” She recognized the cultural nature of these developmental expectations, such as when she said, “they have different things by culture, like even with the feeding, there are some cultures that seem like they feed their kids by hand much longer than what I’m used to but that’s fine.” Rose believes her most effective practices involve blending in “with whatever they’re doing, so I think that’s the biggest thing. Like I go see what their life looks like then I try to fit into what their already doing ... if they’re getting ready to, if they are fasting all day and only eating at night and I’m there for feeding therapy I have to figure out what to do and I will figure that out.”

Rose often spoke of the importance of open and respectful communication to fully understand any cultural differences, explaining “the challenge is just to communicate openly with them about those things and I try to be very upfront about ‘oh, well that’s different than what I’m used to, can you tell me more about that’ without it being judgmental.” She spoke of a challenging situation with a family from Morocco whose son was demonstrating aggressive behaviors. The family was very permissive of his behaviors, but also concerned with his aggressiveness. “You can’t just go in there and tell the mom this is what you have to do, it’s a conversation. It’s a process, you have to start with, in your goal you said when we were talking about how you don’t want your child to hit and bite and scratch so let’s first look at when is that

happening.” Throughout the interview Rose stressed the importance of listening to understand from the family’s perspective.

Reflective practice. When asked how she assessed the effectiveness of her practices, Rose’s responses centered on family feedback. ”The child should be making progress towards those goals that I helped the family write, whatever the family said they want to do... So if I am able to walk out of there and that mom knows exactly what to do then I’ve done my job.” Rose frequently mentioned seeking feedback from families and incorporating that knowledge into her service provision. She smiled when she said “they don’t kick me out so that’s a good sign!” Rose also spoke of consulting with her team (the other service providers with whom she works) when she experienced challenges or needed information, stating “... we support each other and we seek out that information from each other.” Rose is constantly seeking out new learning opportunities to keep up with changes in the field and improve her practice. “I go to a lot of trainings, I read a lot, I stay on ACA’s web site all the time... I stay pretty up to date.”

Case Two: Barbara

Barbara is a self-possessed European-American woman in her fifties who provides early intervention services as a developmental specialist. She obtained an Ed. D in Child and Youth Studies and Program Management from a private university in the Southeastern United States. Barbara has been providing early intervention services for six years as a contracted employee for an organization and also operates a personal consulting and coaching firm for early childhood businesses and families of young children with disabilities.

Self-assessment. Barbara completed an online questionnaire including 23 items from the Promoting Cultural and Linguistic Competency Checklist (Appendix C), which is a self-assessment checklist for professionals providing services and supports in early intervention and

early childhood settings (Goode, 1989/2009). The questionnaire items have three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or never, or statement applies to me to minimal degree or not at all. All items are positively worded, so an ‘A’ response indicates a high usage of a specific culturally responsive practice, while a ‘C’ response indicates minimal to no use of the practice. Barbara gave a response of ‘A’ for 19 items, and a B or C response with an explanation for four items, detailed in Table 6.

Table 6

Barbara’s B or C Questionnaire Responses

Item	Response	Explanation
For children and families who speak languages or dialects other than English, I attempt to learn and use key words in their language so that I am better able to communicate with them.	B) Things I do occasionally, or statement applies to me to a moderate degree.	It depends on the family. Some families want to use English even if it is not their native language.
I ensure that all notices and communiqués to parents are written in their language of origin.	C) Things I do rarely or never, or statement applies to me to minimal degree or not at all.	I do not have the capabilities to provide the types of written information in other languages. However, I have used interpreters on home visits when necessary.
I understand that it may be necessary to use alternatives to written communications for some families, as word of mouth may be a preferred method of receiving information.	C) Things I do rarely or never, or statement applies to me to minimal degree or not at all.	Most of my work has been with [state organization], and the program requires certain written communications. Word of mouth is not an option. I'm not sure I would use it anyway, as even in English word of mouth can dilute or misinterpret communication.

Table 6 (continued)

<p>Before visiting or providing services in the home setting, I seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to families of specific cultural groups served in my early childhood program or setting.</p>	<p>C) Things I do rarely or never, or statement applies to me to minimal degree or not at all.</p>	<p>I never assume anything about any family I visit, no matter what the culture. I also have studied and taught about these things and so don't feel a need to "study up" each time. I will often, however, do a little legwork after the first home visit if I feel I need a brush up.</p>
--	--	---

Barbara's responses suggest she feels confident in her knowledge and skills to provide services and supports to culturally and linguistically diverse families, although she feels constrained by some of the written communication regulations of the state's early intervention system.

Knowledge of own culture. Barbara laughingly referred to herself as a WASP, a commonly used acronym meaning White, Anglo-Saxon, Protestant, when asked about the components of her own culture. She then thought for a moment before replying, "I don't know. That's an odd question, I'm not sure how to answer that. I really have to think about it." After a pause, she recalled her upbringing as part of a traditional two-parent family with some extended family support and contrasted it with the prevalence of "fractured" single parent families without extended family supports she sees during her service provision.

While she had difficulty elaborating on components of her own culture, Barbara stated that she did not presume "that my way is the best way or the only way" or "that the way I do it or the way my family would do it is the way somebody else's would." Barbara commented that "most people, I think, act out of their own culture base and that, you know, that slides into just about everything they do... Whereas I think somebody like me, you know, probably has been trained and learned over time not to let that happen."

Knowledge of cultural beliefs and practices. When asked to give an overall snapshot of the families with whom she works, Barbara shared “they definitely go across the spectrum socioeconomically... I’ve worked with just about all different education levels as well.” She further explained that she has worked with families of “all kinds of” races and cultures, and currently is serving families recently immigrated from India, Haiti, and Saudi Arabia, as well as “people who are just plain old USA.” She noted that “no matter what their backgrounds they obviously want what is best for their child.”

When asked how she prepared to work with culturally and linguistically diverse families, Barbara revealed that she most often relies on families to educate her about their home cultures, stating that cultural differences are often “very subtle.” She also emphasized the importance of not assuming families ascribed to specific cultural beliefs, and related a challenging situation with a family from India who were very reserved and commented “it could have just been the family, or it could have been the culture.” Barbara recalled having training in cultural and linguistic diversity during her Master’s and Doctoral degree programs, and researching on her own in preparation for teaching education courses. She stated that she felt “pretty grounded” in her ability to work with diverse families but added “if you asked me specifically what does this culture think about X, I wouldn’t be able to do it but I have pretty extensive training.”

Culturally responsive practices. Barbara spoke fervently about “establishing credibility and also trust” in order to develop a partnership with families in which “they develop their own capacity” to meet the needs of their child. She stated that when she first meets with families she tries to “listen a whole lot” and “not jump to any conclusions based on” initial assessment results. She also relayed the importance of not assuming that families have “total understanding” of assessment results or the early intervention system. Barbara emphasized the importance of time

in the early intervention process. She said that she "rarely writes a plan of care until I've had an opportunity to be with somebody...at least two or three times. Preferably more." In building partnerships with families, Barbara related that "you find your similarities first and then you make connections to the cultural pieces as time goes on because they just seem to emerge normally and naturally."

Barbara stressed the importance of finding out and prioritizing the needs and desires of the families for their child both short term and long term and being able to "work that in context with their skill set, their capabilities, their confidence, what they think they can do and the daily routines, you know, that so critically important." When speaking about identifying areas of concern, Barbara mentioned the cultural nature of developmental expectations and how she tried to couch questions tactfully in terms of the child because something might not be "acceptable to me but it might be to them so that's why I ask." She spoke of necessity for balance in sharing her professional knowledge, telling that "parents like that when they think somebody knows a lot of stuff, um but doesn't force it down their throats." She mentioned asking for feedback on her suggestions with questions such as, "Well, what do you think about that or how do you feel about that?" because "I know how I might feel about a certain thing but I always ask."

Reflective practice. When asked about how she assesses her effectiveness as an early intervention provider, Barbara gave several examples. She said she uses the child's progress "as judged by some traditional standards assessments," but does a lot more "informal sort of evaluation" focusing on parent confidence, comfort, and a sense of "whether they're truly engaged...or whether they're just going through the motions." She shared that she uses her intuition to informally evaluate her effectiveness and that "I just know when it feels right and when it doesn't." She went on to tell that if a situation did not feel right she would try to

sensitively address it with the family through questions and observations and "be extremely patient." She said that she "can't think of any instance where anything was so insurmountable that we had to change providers."

If Barbara encounters a situation which she thinks is outside of her skill set she will reach out to colleagues or request a consultation because "some of the pieces of the puzzle may not be immediately available to you but you seek them out so that you can put them where they belong." Barbara explained that "I believe in ongoing education. You just have to make sure you're getting what you need where you can." She obtains new knowledge and skills in multiple ways. "I go to conferences, I read, I do my own research if I need to, to see what's going on."

Case Three: Martha

Martha is a stately African-American woman in her fifties who provides early intervention services as a developmental specialist. She obtained a Bachelor's degree in Psychology and Child Development and has been providing early intervention services for 33 years, most currently as a contracted employee for an organization which provides early intervention services both in the natural environment and through a charter school with therapeutic full day services. In the past Martha provided services as a therapeutic classroom teacher but now provides services only in the natural environment.

Self-assessment. Martha completed an online questionnaire including 23 items from the Promoting Cultural and Linguistic Competency Checklist (Appendix C), which is a self-assessment checklist for professionals providing services and supports in early intervention and early childhood settings (Goode, 1989/2009). The questionnaire items have three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or

never, or statement applies to me to minimal degree or not at all. All items are positively worded, so an 'A' response indicates a high usage of a specific culturally responsive practice, while a 'C' response indicates minimal to no use of the practice. Martha gave 21 'A' responses, with one 'B' response for the item "Before visiting or providing services in the home setting, I seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to families of specific cultural groups served in my early childhood program or setting." She gave one 'C' response for the item "I understand that it may be necessary to use alternatives to written communications for some families, as word of mouth may be a preferred method of receiving information." These results suggest that Martha uses a variety of strategies in serving culturally and linguistically diverse families.

Knowledge of own culture. When I asked about the major components of her culture, Martha warmly recounted her experiences growing up as part of a close-knit extended family and community. She gave an example of how she acts upon her belief in community by telling about how she will sometimes speak with young people who are using profanity in public because "I just believe that we all have a responsibility to not just close our eyes to things that we know can be changed and should be changed to make this whole world better." Martha explained her experiences growing up in an African-American family shape her service provision and her view that "no one person is better than the other...so when I approach my families, I mean, I don't see color when I go in with my kids or race...I see a child and a family." She laughingly shared "you can imagine a lot of my families have probably never really been around a black person. And how many families have had a black person love on their little white child?"

Martha spoke of her love of children and her belief that children were like "a blank canvas, they're sponges...the sky's the limit." She further explained "I just believe that every

child can learn and every child can succeed, even the most involved kids." She said that in her service provision "the central key is love for the child" and gaining the trust of the family. She emphasized "just not putting my belief system and judgment onto them but... Respecting them and respecting whatever beliefs they have." She explained how she has become more aware of the importance of culture over time. "I think back when I just started in this field you just take for granted the culture and people's beliefs and how strong those beliefs are. And so you really have to go in there and respect, because you certainly can't change something if you've been raised that way all your life and it's been passed down through generations and generations and generations."

Knowledge of cultural beliefs and practices. Martha shared that over the course of her career there have been significant changes in the cultural diversity of her caseload, and she has had to adjust her practices to better serve the families. She has "become more aware and try to gain more information about their different cultures." This information mostly comes from the families themselves and other professionals from the local Department of Health who also conduct home visits with the families. "I've been fortunate enough to work with a lot of the [organization name] workers, they're bilingual, they're the ones who send me the referrals...they teach me a lot about their culture." In regards to formal training, Martha shared "It's been a number of years since I've had that cultural diversity course, training...I think when I think back on that course it was probably one of those things where..I probably could have saved my time...so much of it is textbook stuff." Martha clarified that the training might be valuable for some but she found that interacting with families in their homes was "different than what you get in that training."

In thinking about her caseload, Martha said that “maybe a third of the families that I serve are Hispanic” and they “have really taught me a lot.” Martha commented that she made an effort to learn and practice Spanish “just practicing with them as I’m talking and vice versa because a lot of them...they know English and they’re learning to speak it, but they aren’t comfortable and they prefer not to.” She said she has found “that my Hispanic families are much more nurturing...and laid back and follow the child’s lead most of the time” and the overarching priority is to “keep the child safe and secure” without a heavy emphasis on meeting typical developmental milestones.

Martha remarked several times on the intracultural differences among her families, relating that it “varies between especially the Caucasian population...based more upon the reason why they’re there” and identified several factors to which she attributed these differences. She commented that younger mothers with less education and mothers who were mandated to participate due to “babies that are substance exposed” had “a lot of defenses, a lot of guilt...they look at you as someone who might be judgmental.” She contrasted this to Caucasian families with premature babies who had spent a lot of time in the neonatal intensive care unit and viewed EI services as “just one more thing” to deal with, but were less guarded because they were not mandated to participate. She also shared that she has become more aware of regional and religious differences among her Hispanic families and told about how she specifically adjusted her practices for a family with spiritual rituals “generally practiced in a certain part of their country, not all of Puerto Rico” who were “very particular about what time they want us to come.” Martha was very emphatic about how “learning so much about the different cultures...has been huge for me...I’ve gotten to accept them [the families] for who they are,

where they are, and work within the confines of where they are, as best I can. I can't negate their beliefs."

Culturally responsive practices. When asked about her effective strategies and practices, Martha responded "I keep in the forefront, I'm in their home, I'm in their space." Martha believes "more than anything that the love I have for children, the hope shines through and then that makes it easier for them." She said that she has often found that families who speak English as a second language need more information on their child's medical condition because "they don't really know what the underlying reasons are or what may be wrong...or the implications of the diagnosis" and they rely on her to educate them. Martha indicated that her first priority is "to find out from the parents what are their concerns" and "educating the parents about what is appropriate and why they need to do these steps, ABC, to get to where the end goal is." However, she cautioned "as much as we want to educate, you cannot negate what they know and who they are as a people."

She recounted several instances in which she worked through cultural differences to meet the needs of families. In the first, she was working with a mother with whom she experienced a language barrier while trying to explain how to position her baby to encourage motor development. "When she went to show me I knew she didn't get it...I hand-over-hand guided her on her child" until the mother understood the skill. Martha explained that this process took more time than the allotted hour but "sometimes you are going to have to go a little over" so that parents "can receive what you're saying and trying to share with them." In another family, a young Haitian mother was being counseled by nurses to continue breast feeding her premature son, while "her husband, and in that culture the males tend to be pretty dominant, and her husband is basically saying no...it's time to stop." She remarked "you have to know when to

draw the line, where to say okay well this is what we know and we know that this is going to be beneficial to him...but you can't force that mom or I can't continually beat her up about that. You can't make her feel any less of a mom if she wants to stop breastfeeding." She said in cases where her professional knowledge differs from the cultural views of the family she "put[s] the information out there...respect where they...and let them, hopefully they'll take what we are sharing and use it effectively."

Martha revealed that in situations where she has dealt with Caucasian families of substance-exposed children who are court ordered to participate in early intervention, "there's a lot of defenses...they look at you as somebody who might be judgmental." She explained "I really try to go in there ...Listen I have the baby's referral, let's just see what we can do to help, you know. Non-judgmental, non-threatening." She mentioned the importance of extended family as a protective factor to many of her African American and Hispanic families, saying "a lot of my families I don't see how they could make it without that support," contrasting it with her Caucasian families in which she did not typically "see or hear much about their family" unless there was a custody agreement in place.

Reflective practice. When asked how she assessed the effectiveness of her practices, Martha indicated she relies primarily on "the child's progress and how I see the parent interacting with the child...that's just critical." She described a strong collaborative relationship with other therapists and service providers in her organization "there are a lot of people that I can contact if I'm not sure about something. Very seldom do I feel overwhelmed." She referenced seeking feedback from these peers, as well as families and professionals from the local health organization who also worked with the families. Martha further explained she often will "make

time to go in and see” coworkers to discuss things “I could be doing and learning about and getting better at” and avoid becoming “stagnant.”

Martha mentioned several times that she is “a learning by doing person” and commented that her relationship with other therapeutic professionals “laid the foundation for my knowledge base...when I think about what I do... and what I feel comfortable with...it’s because of that experience.” She said that she also tries to do a lot of “reading online and try to attend as many workshops” as she can to keep abreast of changes in the field. She specified that she believes in ongoing education but “my philosophy itself [is] that what children need and the basis for development doesn’t necessarily change.”

Case Four: Sarah Jane

Sarah Jane is a thoughtfully candid White Hispanic woman in her late thirties who provides early intervention services as a developmental specialist. She obtained a Bachelor’s degree in Deaf Education and Elementary Education and has taken some additional coursework in communication disorders. She has been providing early intervention services for three years as a contracted employee for an organization which provides early intervention services both in the natural environment and in a clinic setting. In the past Sarah Jane provided services in a clinic setting but now provides services only in the natural environment.

Self-assessment. Sarah Jane completed an online questionnaire including 23 items from the Promoting Cultural and Linguistic Competency Checklist (Appendix C), which is a self-assessment checklist for professionals providing services and supports in early intervention and early childhood settings (Goode, 1989/2009). The questionnaire items have three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or

never, or statement applies to me to minimal degree or not at all. All items are positively worded, so an ‘A’ response indicates a high usage of a specific culturally responsive practice, while a ‘C’ response indicates minimal to no use of the practice. Sarah Jane gave a response of ‘A’ for 13 items, a B response for nine items, and a C response for one item. She provided explanatory comments for four of these items, detailed in Table 7. Sarah Jane’s responses indicate she uses multiple practices to provide services and supports to culturally and linguistically diverse families, although her use of several of the recommended practices occurs on an occasional and not regular basis.

Table 7

Sarah Jane’s B or C Questionnaire Responses

Item	Response	Explanation
I ensure that all notices and communiqués to parents are written in their language of origin.	B) Things I do occasionally, or statement applies to me to a moderate degree.	I have had an interpreter with me to communicate documents written in English. The clinic I work for supplies medical consent forms in Spanish for the Spanish-speaking parents.
I understand that it may be necessary to use alternatives to written communications for some families, as word of mouth may be a preferred method of receiving information.	B) Things I do occasionally, or statement applies to me to a moderate degree.	Use interpreter.
I use alternative formats and varied approaches to communicate with children and/or their family members who experience disability.	B) Things I do occasionally, or statement applies to me to a moderate degree.	I have used picture drawings/easy to understand graphs when explaining evaluation scores to low IQ parents.
Before visiting or providing services in the home setting, I seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to families of specific cultural groups served in my early childhood program or setting.	C) Things I do rarely or never, or statement applies to me to minimal degree or not at all.	I seek information during initial visit and then during treatment times as family becomes more comfortable with me.

Knowledge of own culture. When asked about her own culture, Sarah Jane responded that “a lot of cultural things would have to be with my expectations of children.” She spoke of her nuclear family as central in her life, which operated as a team with “a hierarchy as far as order” in which she was responsible for training her children in “obedience” and always having “high expectations” for them. While Sarah Jane confessed that she has “certain expectations that I would love for parents to have for their children” she said she recognizes “our Westernized thinking” and that families may hold different expectations in that some traditional developmental milestones are “no big deal to them.” She explained, “I think in some ways the culture has a lot to do with that.”

Knowledge of cultural beliefs and practices. Sarah Jane shared that she did not recall taking any college courses focusing on cultural diversity, and that in her three years providing services she has not been aware of any trainings offered “specific to better services and different cultures.” She stated that she primarily gained information about cultural beliefs and practices through asking the family “those particular questions that are necessary in order to make sure that I’m understanding the cultural differences or their wishes based on their cultural traditions.” She also relies on her “past experience with families that I’ve worked with who have been from different cultures” and “some of the research I’ve read over the years” to build her knowledge base.

When describing the families she serves, Sarah Jane said her caseload was “fewer White families...its primarily African American, Spanish, Filipino” and “socioeconomically, from poor to very affluent, I’d say the majority of them are working class.” She identified several cultural differences she has observed among the families she serves. She discussed the impact that

culture has on what families “consider to be acceptable behaviors and what they consider to be unacceptable behaviors,” explicating that “sometimes the Asian families are a little too passive, but then some of the other cultures are very authoritative.” She further shared that “definitely the Asians and some of the Hispanics really baby the children” giving the example of a longer acceptable time-frame for children using a bottle, and commented “the Asian families definitely have a different perspective when it comes to that.”

Another cultural difference Sarah Jane mentioned was that “some African American families, especially those that are low socioeconomic” had higher expectations of independent functioning for their children “almost to where the child is doing a lot more than what you would be expecting a child of their age to be doing.” She paused, then brought attention to possible intracultural differences, adding “I don’t know if that’s just a part of that culture...or whether that’s education...and a very low, low income” because the children could “do so many adaptive skills but when it came to cognitive or language [abilities] they had hardly any.” She continued to say that she had read some research “over the years that especially in that culture caregivers don’t tend to talk very much” and that “research says a lot of it is education based.” She shared that her experiences echoed the research in that “I have found that, especially in that cultural group, that there’s a huge challenge to get families to communicate versus just using one word responses or pointing, mostly non-verbal.”

Culturally responsive practices. Sarah Jane stated that she believes her job is primarily “help[ing] to teach and coach families [in] skills that they want to target for their child’s overall environment.” She elaborated on this idea by saying her most important responsibility is “educating the families [in] their particular area of concern...helping them to better understand the weaknesses and then what they can do.” She compared the process to giving the parents a

road map to where they wanted to go. She emphasized that to do that, she needed to gain each family's trust and develop a relationship with them, "making sure they see me as just part of the team and they're basically at the helm guiding, making the decisions, that I'm just here to help empower them and teach them along." As part of this process, she shared that she asks many questions "to make sure that I'm understanding the cultural differences or their wishes based on cultural traditions."

Sarah Jane said that her most effective strategies in working with culturally and linguistically diverse families were constant communication and collaboration with families, "really taking a lot of time to dialogue and really get the parent to verbalize what it is they really want so we're going down the right rabbit hole." She continued explaining that part of this process is "realizing that the parent's priorities shift at times" and following their lead. She said that she often used visuals, such as developmental charts, during her visits when sharing and explaining information "making sure they have something to look at and follow to see, okay, this is what comes first and this is what comes second." She also takes time to "explain the benefits of them moving on, but if this family then says...this is what we do with our other children, or this is part of our culture, then...I drop it and then let them do what they need to do." She continued that in those situations it was important to have "open dialogue and listening to the family" and also give them information about possible challenges that could arise, saying "you want to achieve this, this could be very difficult until you can implement this".

Reflective practice. In assessing her own practices, Sarah Jane said she uses several methods, both formal and informal. She seeks feedback from families, looks at "how the child is progressing" and uses a common early childhood assessment, the Hawaii Early Learning Profile to "make sure that I'm hitting especially the areas that the IFSP goal is targeting" and to stay on

track in monitoring the child's overall development. Sarah Jane also commented that she desired "more of an opportunity for collaboration" and "to be observed" to gain feedback from other professionals on her strengths and to provide suggestions such as "this might have gone a lot better if you had done X with them instead of you did Y."

Sarah Jane shared that she is constantly looking for "any chance to...help build my skills as an EI" and tries to attend workshops and in-services when they are offered. She shared her disappointment that the workshops are often in another county and not offered often, as well as the lack of training offered on "better services and different cultures." To supplement sparse educational opportunities she reported "sometimes I'll get on the internet and look at some...things I feel like I'm weak in" and "will call on a colleague just to get a different perspective."

Case Five: Christina

Christina is an animated White Hispanic woman in her mid-thirties who is quick to laugh. She provides early intervention services as a developmental specialist who is bilingual in English and Spanish. She obtained a Bachelor's degree in Early Childhood Education and has state teacher certification. She has been providing early intervention services for five years as a contracted employee for an organization which provides early intervention services in the natural environment.

Self-assessment. Christina completed an online questionnaire including 23 items from the Promoting Cultural and Linguistic Competency Checklist (Appendix C), which is a self-assessment checklist for professionals providing services and supports in early intervention and early childhood settings (Goode, 1989/2009). The questionnaire items have three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do

occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or never, or statement applies to me to minimal degree or not at all. All items are positively worded, so an 'A' response indicates a high usage of a specific culturally responsive practice, while a 'C' response indicates minimal to no use of the practice. Christina gave a response of 'A' for 21 items, one 'B' response, and one 'C' response. Christina's response of 'C' was to a question asking if she prepared in advance of meeting a family by researching their culture, to which she commented, "I don't know the family's culture beforehand, it is not on the IFSP." Her responses indicate she regularly uses multiple practices to provide services and supports to culturally and linguistically diverse families.

Knowledge of own culture. When asked about her own culture, Christina stated that as an educated Hispanic woman from Columbia she is "very grounded" and "we do not let anybody tell us what to do." She shared the importance of family tradition in childrearing practices, "My grandmother used to do this, my mother used to do this..." She spoke to the importance of her status as an educator in her worldview saying, "I even had my own child in the program and it's hard to have somebody else come and tell you what to do and you're like 'Okay, well I was a teacher'." Christina related that she has found her own culture and experiences to be helpful in many situations with Hispanic families who were not satisfied with prior providers "not because they were not doing their job, it's just the way they came in to them." For example, she said "I think it helps me out a lot because ...we give the bottle until you're like five years old and American people don't do that and it drives everybody crazy, but for me I understand it." She further explained "It's like you guys let them feed themselves and we don't. Because they make a mess and we want to make sure they eat...so I'm more flexible...because I lived that." Christina also spoke of the value of her culture and being bilingual with Hispanic families

because “it’s easier to communicate with them than somebody else from another space. They’re like ‘oh she understands because she has my same beliefs’ kind of thing.” While Christina recognized how her culture served as an asset with many families who shared similar cultural characteristics, she also emphasized that “you have to be careful where you’re going in and how you approach them. Because you can’t just go...oh, they’re like me.”

Knowledge of cultural beliefs and practices. Christina reported that she primarily learns about the cultures of families through observation and asking them directly. She reported getting training in working with culturally diverse families in Columbia, telling “You have so much diversity in Columbia, you have a lot of European influence. So we did a lot of that and really got more of it hands on.” She acknowledged the value of coursework, but added “one thing is the books and one thing is when you go to school, but when you’re really in the street it’s totally different.”

When asked about her caseload, Christina remarked that primarily, “I have the city; I have a lot of my Latin people.” However, she added that her caseload has a “little bit of everything” ranging across socioeconomic and geographical markers as well as ethnic and racial diversity. She said that in her experiences with different cultural groups she has noticed similarities across cultures. “I’ve discovered a lot of my Hindu families and my Morocco families, they have almost the same things” found in Hispanic cultural norms for children and gave an example of how none of her families in those cultural groups used “sippy cups”.

Christina wished that she had access to more information about family cultures and other characteristics when assigned a case, saying “I would like to know a little bit more about the family, a little bit more history about them so you know what you’re walking into.” She illustrated this desire with a recollection of a situation where she went for an initial visit with

three adults and a baby and she realized that “they’re all mentally handicapped. But I was never told; I was never given anything about it.” In another case, she was assigned a Hispanic family in which both parents and children were deaf and shared “it’s been really challenging...I’ve been learning a lot about the deaf culture” on her own.

Culturally responsive practices. Christina stated that she wanted families to think of her “like a tool, I come to help them out, help them understand a child, what’s going on...to support.” She noted how her role changed across families “because they’re all different” although the end goal was always to “make sure the child is doing what he’s supposed to be doing, that they [the family] get a better kind of life.” When asked about her effective strategies and practices, Christina shared that “it’s just trying to get their trust and...getting them secure in what they’re going through but not...say everything is going to be great.” She stressed attending to the needs of families and giving them time to ask questions because “they just get labeled or they get the diagnosis and they don’t know what to do. They’re just scared with it.” Christina also spoke of how she couches her suggestions “softly...kind of ‘Hey, have you tried this or have you done the other thing’ not to impose on them what to do.” She believes much of her success in cases where other providers were dismissed by families is due to her ability to read the communication style of the family and not push families because “...it’s not easy just to come in and somebody else is telling you ‘You need to do this.’ It’s not going to work.”

Christina drew attention to the importance of creativity and perseverance in working through challenges with families, saying “I look for different ways to get it done...sometimes I just improvise really.” She gave a specific instance in which she was working with a deaf family and every time the child was angry he would squeeze his eyes shut to preclude communication, which frustrated his parents. Christina shared that she tried multiple sensory approaches such as

brushes, warming and cooling sensations, and tickling to startle the child into opening his eyes. She laughed, recalling the translator was “cracking up” and the mother signed “she’s getting creative, isn’t she?” Christina closed the anecdote by remarking that the mother began to use several of the “creative” sensory strategies effectively.

Christina also brought up the challenges of working with families who use discipline strategies discouraged by the dominant culture in the United States. For example, many of her Hispanic families use corporal punishment such as “spanking” with their toddlers because “you’re just brought up that way and they don’t know other ways to discipline their kids.” She said in those instances she shares other discipline strategies and tools “but we know it’s going to happen no matter what” so she will make them aware of her professional responsibilities and will tell them “don’t do it in front of me because I’m a reporter.”

Reflective practice. When asked how she gauged her effectiveness, Christina placed primary emphasis on “the goals” of the IFSP and how she observed the goals being met by “the kid’s doing what they’re supposed to be doing or the family’s working with the tools I gave them.” She also placed importance on family feedback as to how strategies are working between visits. Christina revealed that she routinely asks her peers for feedback when she is experiencing challenges, laughingly sharing “I talk to my team. I need help!”

Throughout the interview, Christina affirmed her commitment to continuous learning, sharing “I like to look for, there’s always got to be an answer for something and even if I don’t know I’ll go someplace and look for it.” She continued “I would like to learn a lot more things professionally” and elaborated on different methods she uses for building her professional knowledge and skills. Christina reported that she often uses her peers as resources for professional growth. “I do ask my team...’Hey, how do we do this, teach me a little bit about

this, I don't know about it. I'd like to learn about it." She also reported using the internet to find and read research in the field both in the United States and "a lot of overseas searching too," adding "I think sometimes...we don't know everything and we're still trying to and if they don't have all the tools it's easier to just research."

Case Six: Donna

Donna is a gregarious White female in her thirties who provides early intervention services as a developmental specialist. She obtained a Bachelor's Degree in Psychology as well as a Master's degree in Social Work and has been providing early intervention services for six years as a contracted employee for an organization which provides early intervention services both in the natural environment and through a charter school with therapeutic full day services. Donna only provides services in the natural environment.

Self-assessment. Donna completed an online questionnaire including 23 items from the Promoting Cultural and Linguistic Competency Checklist (Appendix C), which is a self-assessment checklist for professionals providing services and supports in early intervention and early childhood settings (Goode, 1989/2009). The questionnaire items have three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or never, or statement applies to me to minimal degree or not at all. All items are positively worded, so an 'A' response indicates a high usage of a specific culturally responsive practice, while a 'C' response indicates minimal to no use of the practice. Donna gave a response of 'A' for 18 items, and five 'B' responses. She did not provide comments for any of the questionnaire items. Her responses indicate use of many recommended practices to provide services and

supports to culturally and linguistically diverse families on a regular basis, and several more on an occasional basis.

Knowledge of own culture. Donna quickly characterized herself as a “stereotypical middle class working mom” when asked about her culture. She emphasized the centrality of childrearing practices in “the culture that me and my friends are in,” giving the examples of the importance of children’s diet, television watching guidelines, and reading to children each night. She added, “You hear everything you have to do and everyone is stressed, everyone’s got a thousand things to do every day, but everybody wants what’s best for their kids to the point that it’s almost ridiculous.”

Donna spoke several times of her awareness that her views were only one cultural framework out of many, stating “I know my world is very different than a lot of other people’s, and that’s fine.” She shared that she works with a wide variety of families socioeconomically and doesn’t “think for a second that like the family in the million dollar house treats their kids any better...you know, they’re just different but they all have good intentions.” She specifically spoke of working with a young mother below the poverty line, commenting “I don’t let my expectations or all my stresses bother me if I’m working with a 19 year old mom with three kids. She’s not going to have the same life that I do.” She explained “She just needs to make it to that appointment in two weeks, like that’s our goal...if we can do that we’re great” and “I’m not expecting ...all the other stuff that I feel like me and my friends are expected to do.”

Knowledge of cultural beliefs and practices. When asked to describe the families she serves, Donna first focused on socioeconomic status, telling how she will travel from “literally a million dollar house” to an economically disadvantaged “single mom with three kids” during a typical day. She emphasized that her caseload is diverse across many characteristics, “any kind

of race, income, family makeup, everything.” She elaborated “I have obviously White, Black, Hispanic...you know very every day stuff” contrasted with her recent experiences working with a family in which the parents came from two “very different” Middle Eastern countries and “a family who is big Greek Orthodox, like that is their culture, it’s not just their church.” She also spoke of recognizing intracultural differences with an anecdote about “a family who on paper we look very similar...her life is entirely different than mine...yeah we’re from the same culture but I’m not going to pretend for a second that we are doing the same stuff.”

When asked about her preparation in working with culturally and linguistically diverse families, Donna recalled taking “classes on cultural competence...and lots of internships and we’d talk about it” as part of her Master’s program in Social Work. She shared that she learned the most about different cultural beliefs and practices through asking questions and “just being around it.” She related that most families are “fine having the conversation” and are not offended, especially “once you get that dynamic with them.” Donna gave several examples of learning about different cultural practices with families, including a Black mother who told her Black families do not put their babies in the mirror and do not cut their hair until they are a year old. She related an instance when she suggested that a young Mexican mother do nursery rhymes with her daughter and was laughingly told “All you White girls do that...all my White friends do that, they sit in the floor and sing with their babies.” Donna asked “You don’t?” and the mother said “No, Mexicans don’t do that.”

She emphasized the importance of respecting the culture of families, disclosing “You don’t need to change their culture. It kind of irritates me when I hear other coworkers complain. Like Hispanic moms don’t put their babies on the floor a lot. We know that. So why are you

pushing it?" She asserted, "I understand it's not my baby and it's not how she's ever going to do it...It's not a bad thing; it's just different and its fine."

Culturally responsive practices. Donna described her job as working with "infants and toddlers who have delays or possible disability" and while "I'm not going to fix it, we're going to push them as far as we can." She further explained that she worked in the context of "the whole family" and maintained that her most important responsibility was "helping the parents" learn "about the system" and their child's delays by "showing them what's appropriate, what's not appropriate, what's reasonable, what's not." When asked how she developed goals with the family, Donna emphasized the importance of asking parents "What do you think is appropriate?" and combining their input with developmental norms to create six month goals. She stated "we don't usually have a lot of differences" using this approach "as long as they see you're moving towards that [parent desired goal]."

Donna stressed the role of communication in working successfully with families, saying "we just talk about it all...you have to talk to them and figure out if everyone is happy and everyone is progressing." She related that this can be difficult if quality translators are not available, recounting difficulty she has had communicating with some Haitian families because the translator "barely spoke English...I wasn't even sure he was really understanding what I was saying and by the time it got to them and back to me...I didn't feel this was helping." She shared her belief that the lack of communication made it difficult to build a relationship with those families, stating, "I feel like they were incredibly suspicious of me... like they're just tolerating me."

She reiterated the importance of respecting family beliefs and customs, cautioning against providers saying, "You know what you need to do is..." or "This is the way you have to do it."

She asserted “it’s not going to work. They’re going to shut you out.” She suggested finding “common ground” by adapting strategies to fit the needs of families, giving an example in the context of “tummy time” which usually involves positioning children on the floor, and proposed “you could have them put them on the bed; you can start somewhere else.”

Reflective practice. Donna stated that she judges the effectiveness of her practices through observations of child progress towards goals and milestones and “if the parents are happy, if they’re feeling their kids are progressing.” She indicated that obtaining feedback from families was important to her, saying “I’ve never been blindsided by someone who is like ‘that family is not happy’. You know what is going on, you’re in their house, you get an idea.” She indicated dissatisfaction with frequently changing regulations regarding service plans and evaluations in the early intervention system, stating “None of it bothers me anymore...it’s not going to be long and they’ll change it again...I’ll listen and I’ll do my best but...I’ve just accepted that there’s not a standard.”

Donna admitted she is quick to call in professionals from other disciplines for consultation and support if she doesn’t feel enough progress is being made, commenting “I am the first one to say I need help.” Donna said she felt “very lucky” to be part of a collaborative team, and relies on them to expand her professional knowledge explaining “I think I have a lot of advantages...there’s not just EI’s, there’s physical therapy, speech therapy, teachers who have been doing it for thirty years, see I’m never on my own really.”

Data Analysis

Following data collection, four levels of analysis were conducted. The first analytical level consisted of a descriptive analysis of data collected from participant questionnaire responses from an adaptation of the Promoting Cultural & Linguistic Competency self-

assessment checklist (Goode, 1989/2009). In the second level of analysis, interview transcripts were reviewed and determined to support or negate the propositions by utilizing the interview rating scale found in Appendix F (Duchnowski, Kutash, & Oliviera, 2004). The third level of analysis further reviewed the interview data using pattern matching logic with Appendices E & F serving as guides. In the final level of analysis a cross-case synthesis of the data was conducted, as recommended by Yin (2009). All four levels of analysis will be discussed in greater detail in the following sections.

First Analytical level: Descriptive Analysis

Prior to conducting the interviews participants completed a 23 item questionnaire adapted from the Promoting Cultural & Linguistic Competency self-assessment checklist (Goode, 1989/2009). The questionnaire items had three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or never, or statement applies to me to minimal degree or not at all. All items were positively worded, so an 'A' response indicated a high usage of a specific culturally responsive practice, while a 'C' response indicated minimal to no use of the practice. In addition to these responses, participants were provided with a comment field for each item within which they could expand upon their response. Individual participant comments can be viewed in the case narratives in the previous section of this chapter. All participants indicated they used multiple recommended culturally responsive practices on a regular basis or occasional basis when working with families (Table 8).

Table 8

Results of Promoting Cultural & Linguistic Competency Self-Assessment Questionnaire

Participant	A Responses	B Responses	C Responses
Rose (Case 1)	23	0	0
Barbara (Case 2)	19	1	3
Martha (Case 3)	21	1	1
Sarah Jane (Case 4)	13	9	1
Table 8 (continued)			
Christina (Case 5)	21	1	1
Donna (Case 6)	18	5	0

Three of the questionnaire items resulted in B or C responses from multiple participants. These items are displayed in Table 9 along with responses received. The items pertained to information or resources which may not have been readily available to participants for service provision, mandated written communication, and information on family culture prior to service provision.

Table 9

Questionnaire Items with Multiple B and C responses

Item	A Responses	B Responses	C Responses
I ensure that all notices and communiqués to parents are written in their language of origin.	2	2	2
I understand that it may be necessary to use alternatives to written communications for some families, as word of mouth may be a preferred method of receiving information.	4	1	1

Table 9 (continued)

Before visiting or providing services in the home setting, I seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to families of specific cultural groups served in my early childhood program or setting.	1	2	3
---	---	---	---

Second Analytical Level: Testing Propositions

The second level of data analysis was conducted following interview completion. In this level of analysis the researcher and external reviewer independently read interview transcripts, matched responses to corresponding propositions, and determined if participant responses either supported or negated the propositions using the interview rating scale which can be found in Appendix F (Duchnowski, Kutash, & Oliveira, 2004). Appendix E, which linked specific interview questions and propositions, was used as a guide. Participant responses were rated on a seven point scale from +3, to -3. On this scale +3 indicated strong support for proposition, +2 indicated moderate support, and + 1 indicated mild support. Likewise, -3 indicated strong negation of the proposition, -2 indicated mild negation, and -1 indicated mild negation, with 0 indicating data neither supported nor negated the propositions. The external reviewer and researcher were required to achieve a rate of agreement of $\geq 80\%$ and achieved an actual rate of agreement of 98 %overall. The results are detailed in Appendix I.

The propositions addressed four separate assumptions gathered from the theoretical literature on culturally responsive practices. The first assumption is that culturally responsive early intervention service providers have examined their own culture and contains two underlying propositions. The second assumption is that culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the

families they serve and contains three underlying propositions. The third assumption, containing five underlying propositions, is that culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures. The fourth assumption, culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments, contains five underlying propositions. A total score was calculated by obtaining the sum within each category. For example, the third assumption contained five propositions, each with a possible score of +3 to -3, for a range of +15 to -15 for that assumption. Table 10 displays the results of the proposition testing.

Summary

Assumption One. Based on the results of the proposition testing, all six participants' interview responses supported the propositions specific to the assumption that culturally responsive early intervention service providers have examined their own culture. The interview responses given by five of the six providers yielded strong support for Proposition 1.1 by explicitly identifying multiple values and beliefs that contributed to their own cultural views. Barbara's responses in the interview provided weak support for the proposition; while she identified herself as a White Anglo Saxon Protestant, she only gave one specific example of her cultural values and beliefs (valuing the traditional two parent family structure). The interview responses of all six participants strongly (n=3) or moderately (n=3) supported Proposition 1.2 and all participants spoke explicitly of their recognition that their views constituted only one of many frameworks through which actions and events could be interpreted.

Assumption Two. Five of the six participants' responses strongly supported the propositions specific to the assumption that culturally responsive intervention providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.

Table 10

Results from Proposition Testing

Propositions for Assumption 1: Culturally responsive early intervention service providers have examined their own culture.	Cases					
	Rose	Barbara	Martha	Sarah Jane	Christina	Donna
1.1. Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, and acceptable behaviors.	+3	+1	+3	+3	+3	+3
1.2. Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted.	+3	+2	+2	+2	+3	+3
Total Score: (Range ±6)	+6	+3	+5	+5	+6	+6

Table 10 (continued)

Propositions for Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.	Cases					
	Rose	Barbara	Martha	Sarah Jane	Christina	Donna
2.1 Providers demonstrate interest in learning about the cultures of families they serve and incorporate the knowledge into service provision.	+3	+3	+3	+2	+3	+3
2.2 Providers are aware of intracultural differences among families with similar cultural characteristics and do not assume families subscribe to traditional cultural beliefs and practices.	+3	+2	+3	+1	+3	+3
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.	+3	+2	+3	+3	+3	+3
Total Score: (Range ±9)	+9	+7	+9	+6	+9	+9

Table 10 (continued)

Propositions for Assumption 3: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.	Cases					
	Rose	Barbara	Martha	Sarah Jane	Christina	Donna
3.1 Providers frame their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.	+3	+2	+2	+2	+3	+2
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.	+2	+3	+2	+3	+2	+3
3.3 Providers acknowledge any identified differences and explaining the basis of their professional interpretations and suggestions.	+3	+3	+3	+3	+3	+2
3.4 Providers collaborate with families to adapt interpretations and suggestions to honor the values of the family.	+3	+2	+2	+3	+2	+3
3.5 Providers recognize and utilize the culturally protective factors possessed by families receiving EI services.	+3	+3	+3	0	0	-2
Total Score: (Range ±15)	+14	+13	+12	+11	+10	+8

Table 10 (continued)

Propositions for Assumption 4: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.	Cases					
	Rose	Barbara	Martha	Sarah Jane	Christina	Donna
4.1 Providers make time for reflection on a regular basis.	0	+3	+2	0	+1	+2
4.2 Providers seek feedback from families and colleagues following interactions.	+3	+3	+3	+3	+3	+3
4.3 Providers assign importance to continuous self-assessment.	+2	0	+3	+3	+2	0
4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.	+3	+3	+3	+3	+3	+2
4.5 Providers ascribe to the idea of the professional as a lifelong learner.	+3	+2	+3	+3	+3	+1
Total Score: (Range ±15)	+12	+11	+14	+12	+7	+13

They gave multiple examples of demonstrating interest in learning about the cultures of the families they serve, making efforts to understand these cultural beliefs and practices, and awareness of intracultural differences among families with similar cultural characteristics. The remaining participant, Sarah Jane, showed moderate support for this assumption, as she only provided weak support for awareness of intracultural differences between families. However, she spoke several times of how she sought to understand and incorporate cultural knowledge into her practice, as well as how she sought to understand and place value on beliefs that differed from her own.

Assumption Three. The interview responses of five participants (Rose, Barbara, Martha, Sarah Jane, and Christina) all strongly supported the propositions specific to the assumption that culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures. Barbara's responses moderately supported these propositions overall. Two of the six participants, Sarah Jane and Christina did not provide any evidence specific to Proposition 3.5 which dealt with providers' recognition and utilization of culturally protective factors possessed by families receiving EI services. Rose, Barbara, and Martha all gave responses supporting Proposition 3.5 and spoke of extended family supports that seemed more prevalent in some cultures, while Donna's responses negated the proposition in that she felt that her experiences did not reflect a cultural pattern of support.

Assumption Four. Five of the six participants' interview responses strongly supported the propositions specific to the assumption that culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments, while Christina moderately supported this assumption overall. All six participants strongly supported Proposition 4.2 regarding seeking feedback from families and colleagues following interactions,

while support varied widely for two of the other propositions. Participant responses varied in support of Proposition 4.1 pertaining to providers making time for reflection on a regular basis, as two participants did not yield any evidence related to the proposition, one provided weak support, two presented moderate support, and one gave strong support. Participant responses also varied in support for Proposition 4.3 concerning providers assigning importance to continuous self-assessment, with two participants strongly supporting, two moderately supporting, and two providing no evidence related to the proposition.

Third Analytical Level: Pattern-Matching Logic

The third level of data analysis conducted was the pattern-matching logic. According to Yin (2009) the purpose of a pattern-matching logic analysis is to compare the empirically based pattern (i.e. the participant interview responses) with the predicted pattern from the research based propositions to determine whether the patterns coincide. Each participant's interview response scores from the interview rating scale were reviewed to determine if they supported (score of +3, +2, or +1), negated (score of -3, -2, or -1), or provided no evidence (score of 0) for the individual propositions. If a participant's interview responses supported a proposition, the proposition was categorized as "Yes"; however, if interview responses negated the proposition, it was categorized as a "No." If participant interview responses did not provide evidence either supporting or negating the proposition, it was categorized as "No Evidence." All interview transcripts were analyzed by the researcher and an independent reviewer who is knowledgeable in Yin's methodology and in the area of early childhood special education. Results from both analyses were compared to determine inter-rater reliability or percent of agreement. The reviewer and researcher were required to achieve a rate of agreement $\geq 80\%$. In this study, the

researcher and reviewer achieved a rate of agreement of 100%. Table 11 displays the results of the pattern-matching logic.

Table 11

Results of Pattern-Matching Logic

Propositions for Assumption 1: Culturally responsive early intervention service providers have examined their own culture.	Yes	No	No Evidence
1.2. Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted.	6	0	0
Propositions for Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.	Yes	No	No Evidence
2.1 Providers demonstrate interest in learning about the cultures of families they serve and incorporate the knowledge into service provision.	6	0	0
2.2 Providers are aware of intracultural differences among families with similar cultural characteristics and do not assume families subscribe to traditional cultural beliefs and practices.	6	0	0
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.	6	0	0
Propositions for Assumption 3: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.	Yes	No	No Evidence
3.1 Providers frame their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.	6	0	0
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.	6	0	0
3.3 Providers acknowledge any identified differences and explaining the basis of their professional interpretations and suggestions.	6	0	0
3.4 Providers collaborate with families to adapt interpretations and suggestions to honor the values of the family.	6	0	0

Table 11 (continued)

Propositions for Assumption 4: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.	Yes	No	No Evidence
4.1 Providers make time for reflection on a regular basis.	4	0	2
4.2 Providers seek feedback from families and colleagues following interactions.	6	0	0
4.3 Providers assign importance to continuous self-assessment.	4	0	2
4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.	6	0	0
4.5 Providers ascribe to the idea of the professional as a lifelong learner.	6	0	0

Summary

The results of the pattern-matching logic indicate a strong support for the literature-based theoretical propositions across all four assumptions. Interview responses from all six participants supported the propositions specific to the assumption that culturally responsive early intervention service providers have examined their own culture. Similarly, responses from all participants supported the propositions specific to the assumption that culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.

All participants supported four of the five propositions specific to the assumption that culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures. However, only three of the six participants provided support for the proposition that providers recognize and utilize the culturally protective factors possessed by families receiving EI services, while two did not provide evidence germane to the proposition, and one participant negated this proposition. All six participants also supported three of the five propositions specific to the assumption that

culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments. The participants all subscribed to the idea of the professional as a life-long learner, sought feedback from families and colleagues following interactions, and used multiple measures to evaluate their effectiveness as providers. Four of six participants supported each of the remaining two propositions and indicated they made time for reflection on a regular basis and assigned importance to continuous self-assessment, while two participants did not provide any evidence pertaining to these propositions.

Fourth Analytical Level: Cross-Case Synthesis

Following completion of the pattern-matching logic, the fourth and final level of analysis was conducted. The cross-case synthesis allows key data to be displayed for the individual cases through use of word tables incorporating key words the researcher feels are important to the study. This method of analysis is recommended by Yin (2009) to potentially strengthen the validity of the study. The data is organized for each case according to the following categories in descending order: 1) years in practice; 2) educational background and attainment; 3) race/ethnicity; 4) formal preparation /training in working with CLD families; 5) most important job responsibility; 6) stated impact of own culture on services; 7) stated impact of family culture on services; and 8) most effective skills/practices used. Following creation of the word tables, found in Figure 4, the researcher was able to develop cross-case conclusions about the study, which are discussed in Chapter 5.

Summary

Following the four levels of data analysis, it may be concluded that the beliefs and self-reported behaviors of all six participants provided support for many of the high-quality culturally responsive practices indicated in the literature.

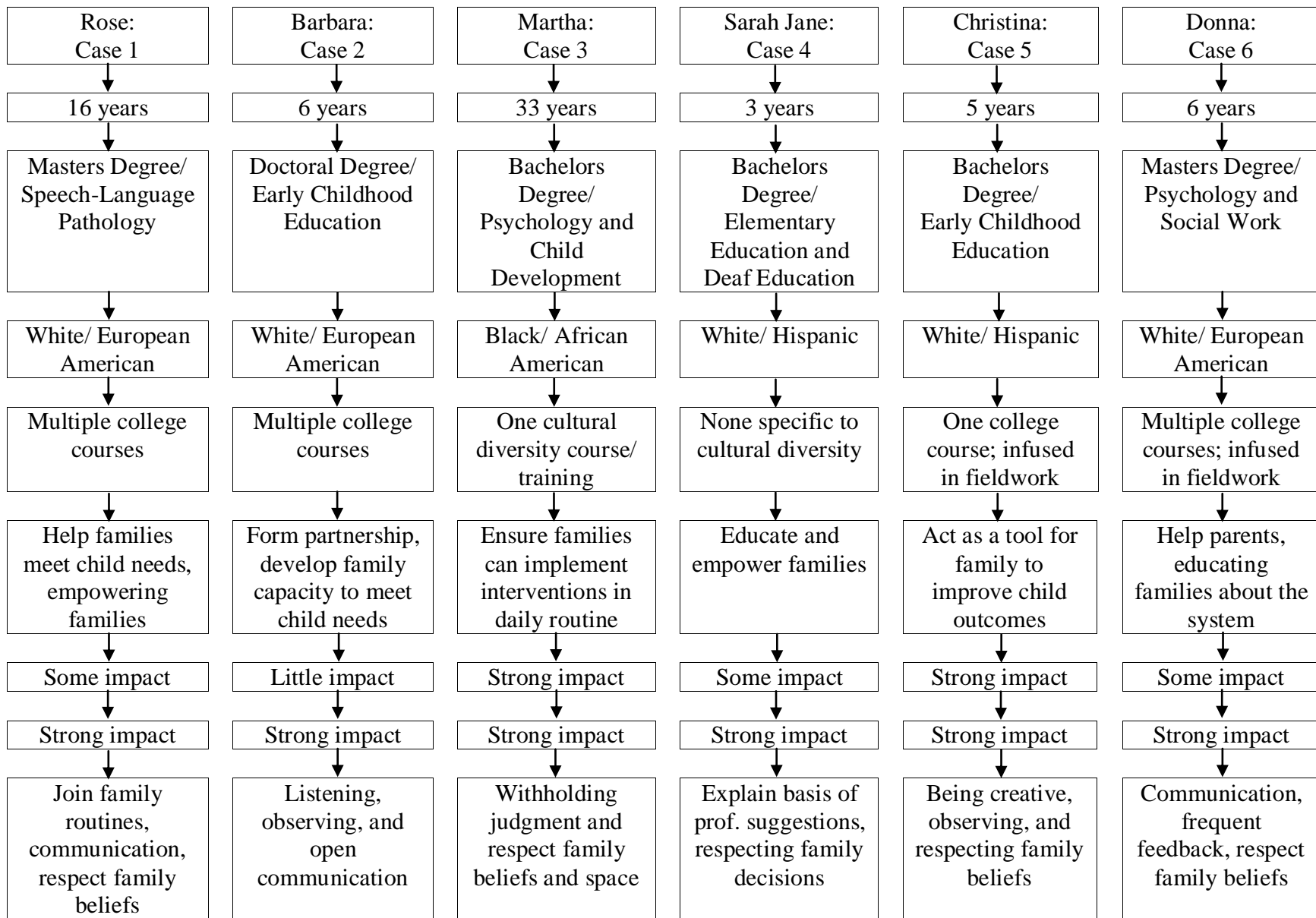


Figure 4. Cross-case synthesis

Of the 15 literature based theoretical propositions, 12 were supported to some degree by all participants. Two propositions, pertaining to provider reflection (4.1) and self-assessment (4.3) were supported by four of the participants, with no evidence provided regarding the propositions by the other two participants. One proposition, dealing with recognition of culturally protective factors (3.5), received support from three of the participants, but was negated by one participant and garnered no evidence from two participants.

All six participants indicated the culture of families had a strong impact on service provision and described several factors which may contribute to a family's culture. Two of the six participants (Martha and Christina) believed their own culture had a strong impact on their provision of early intervention services, three participants (Rose, Sarah Jane, Donna) believed it had some impact, and one participant (Barbara) stated it had little impact on her service provision, owing to her training in culturally competence. During the interviews, all six participants described several common practices they personally used in service provision and which they considered to be culturally responsive, including establishing open communication with the families and demonstrating respect for family beliefs and practices. All six participants also indicated frequent use of multiple practices identified as culturally response via responses on the online questionnaire.

Five of the six participants reported some formal education or training in working with culturally diverse families, although the quantity and delivery varied across participants. Only Sarah Jane did not recall having any formal experiences specific to cultural diversity as part of her preparation or professional development. All six participants reported their primary means of learning about cultural diversity was from families themselves, while two respondents (Rose and Martha) also reported obtaining information from other professionals. Chapter 5 will discuss

interpretations of the data specific to the four assumptions and their corresponding propositions.

Each of the research questions will then be addressed through a summary, followed by the

limitations of the study and implications for future research.

CHAPTER FIVE:

IMPLICATIONS AND SIGNIFICANCE

In the United States, early intervention (EI) providers are often expected to work in the natural environment with culturally diverse families whose beliefs and values may differ from their own (Lynch & Hanson, 2011). Culturally responsive practices have been posited as a way to enable EI providers and families to collaborate and communicate more effectively by minimizing conflicts stemming from cultural differences (Kalyanpur & Harry, 1997; Lynch & Hanson, 2011). Positive effects of culturally responsive EI service provision include more positive child and family outcomes (Boyd et al., 1995; Dunst et al., 2007; Turnbull et al. 2011) as well as higher ratings of family satisfaction with services (Boyd et al., 1995; Dunst et al., 2007). This study investigated the expressed beliefs and practices of in-service EI providers regarding culturally responsive practices and compared them to the tenets of best practice set forth in the conceptual literature, thereby testing the theory that cultural responsiveness is an integral component of effective EI service provision. This study was guided by the following research questions:

1. How do early intervention providers define, learn, and express usage of culturally responsive practices?
2. To what extent do their beliefs and self-reported behaviors support high-quality culturally responsive practices indicated in the literature?

Data collected consisted of a questionnaire with items adapted from the Self-Assessment Checklist for Personnel Providing Services and Supports in Early Intervention and Early

Childhood Settings (Goode, 1989/2009) and participant interviews. Data were then analyzed according to four levels of analysis suggested by Yin (2009) for multiple case studies.

Discussion will center on each of the four central theoretical assumptions and underlying propositions tested in this study. A summary addressing each of the research questions will be provided, followed by implications for future research and the limitations of this study, then a reflection on the methodology and the role of the researcher.

Assumption One: Culturally responsive early intervention service providers have examined their own culture.

Two propositions gathered from the literature base fall under the assumption that culturally responsive early intervention providers have examined their own culture. Multiple scholars have theorized that culturally responsive EI providers are aware of the relativity of their cultural lens and are able to articulate their cultural beliefs and practices (Harry, 1992; Lynch & Hanson, 2011; Paul and Roth, 2011). Furthermore, they are aware that their own cultural beliefs and practices are not universally applicable and represent only one way in which a child may be raised (Harry, 2002; Lynch & Hanson, 2011). According to questionnaire and interview responses, all participants in this study perceived themselves as aware of their own culture's relativity and could articulate aspects of their own cultural beliefs and practices, contrasting findings from Gardiner and French's (2011) study of EI providers. While all participants stated that their own culture factored into their EI service provision, they differed in their perception of the impact it had on their work. Two participants, Martha and Christina, indicated their culture was an inextricable part of themselves as early interventionists and the services they provided, best illustrated by Martha's comment that "It's who I am, it's why I am who I am." It is interesting to note that these two participants also gave more detail about their cultural beliefs

and values in their interviews compared to the other participants. This supports findings by Lee (2003) that African-American and Hispanic/Latino American providers reported examining their own cultural beliefs, values, and opinions more often than European-American counterparts. Barbara's response that her culture has little impact on her service provision due to her training may indicate that she feels her professional preparation enables her to recognize when her cultural views, beliefs, and values are not in harmony with those of the families she is working with and to accommodate for those differences.

All six participants spoke to cultural differences present in many families receiving early intervention services comparative to Euro-normative standards and best practices of child development. These differences echo those referred to by Harry (2002) and Rogoff (2003) and suggest that these participants are indeed able to recognize the cultural implications of developmental norms. However, participant interview responses also indicated that they perceived there to be universal developmental trajectories shared across cultures, even if time frames for acquisition of certain skills differed. For example, Sarah Jane spoke of the developmental steps involved in transitioning to solid food, even if the expected ages for these transitions to take place differed and Christina spoke of differences in age at which children are allowed to self-feed. As suggested by Harry (1992) and Lynch and Hanson (2011), all participants emphasized the centrality of the family in their provision of EI services and spoke of their recognition that services must be tailored to the families' worldview, beliefs, and values, even if they differed from their own personal and professional beliefs. Barbara succinctly summarized this in her statement, "I definitely don't presume that the way I do it or the way my family would do it is the way somebody else's would."

Assumption Two: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.

Three propositions grounded in the academic literature were developed for the assumption that culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve. The literature base indicates that cultural groups vary widely in their expectations and beliefs regarding developmental milestones and may emphasize different skills and behaviors (Olivos, Gallagher, & Aguilar, 2010; Rogoff, 2003; Wu, 2009). These differences often encompass how families attribute responsibility for and respond to misbehavior (Spicer, 2009; Withrow, 2008). Multiple scholars suggest that EI service providers must be aware of and attend to these differences in cultural practices to avoid challenges in their provision of services (Baghwanji et al.2010; Jackson, Leacox, & Callendar, 2010; Withrow, 2008). However, research also cautions against making stereotypical assumptions based on family membership in single cultural categories (Darling & Gallagher, 2004; Harry, 2002; Lynch & Hanson, 2011).

The three propositions developed for this assumption were supported by the interview responses of all six participants. All six participants' responses indicating they made efforts to understand cultural beliefs and practices which differed from their own. In support of scholarly recommendations that providers cultivate respectful, open communication to obtain knowledge of family cultures (Barrera & Kramer, 2009; Kalyanpur & Harry, 1999, Lynch & Hanson, 2011), participants reported respectfully asking questions and observing were their primary methods of learning about family routines and what families expected of their children at different stages of development. All six participants provided examples of how they used this information to adapt services to better fit the needs and expectations of the families whom they serve. For instance,

Rose and Martha both specifically spoke of changing the times when they met families in order to respect their religious observances. Responses from all participants indicated they were aware of intracultural differences and avoided making culture-based assumptions, exemplified by Barbara's questionnaire comment "I never assume anything about any family I visit, no matter what the culture."

Assumption Three: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.

Five literature-based propositions were developed related to the assumption that culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures. Multiple scholars have advocated for the use of process-oriented culturally responsive practices by EI providers in order to bridge differences between provider and family cultures (Barrera & Kramer, 2009; Kalyanpur & Harry, 1997; Lynch & Hanson, 2011; Turnbull et al., 2011). Five of the six participants strongly supported and one moderately supported the propositions specific to this assumption overall, although support varied significantly for the proposition pertaining to culturally protective factors.

Mogro-Wilson (2011) and Withrow (2008) suggest that recognition and utilization of culturally protective factors may enable EI providers to more effectively engage with and provide services to families. Culturally protective factors are factors present in a cultural group that may increase the resiliency of families. For example, Withrow (2008) described maternal support groups in a community as being a culturally protective factor of many Latino families. Three participants strongly supported this proposition and specifically mentioned extended family as a culturally protective factor, with Martha specifying "I think that in the African

American race that's huge, as well as in the Hispanic, you know that extended family.”

However, Donna moderately negated this proposition stating that in her experience, “You hear the stereotypical like oh the Hispanic cultures they're all very close and lots of relatives, but then I've seen some that don't have any help...so I don't really see much of a pattern.” Donna's response indicates that she has knowledge of the concept of culturally protective factors such as extended family, but she hesitates to ascribe these factors to an entire cultural group due to intracultural differences. Neither Christina nor Sarah Jane gave any evidence corresponding to this proposition, as they both spoke of challenges they encountered when working with specific cultural groups as opposed to beneficial factors.

It is noteworthy that while all participants provided moderate to strong support for three of the other four propositions subsumed in this assumption, all six participants provided strong support for Proposition 3.3 stating that providers acknowledge any identified differences and explain the basis of their professional interpretations and suggestions. All of the participants relayed the importance of sharing their professional knowledge with families regarding *why* they made the suggestions they did, instead of expecting families to simply accept professional recommendations. This directly corroborates one of the guidelines of cultural reciprocity advanced by Kalyanpur & Harry (1997).

Assumption Four: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.

Five propositions were constructed from the literature base pertaining to the assumption that culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments. Reflection is a recommended practice for EI providers according to the Division for Early Childhood (DEC) of the Council for Exceptional

Children, which defines it as “systematic and ongoing review, critical analysis, application, and synthesis of knowledge, skills, and dispositions specific to working with children birth through 5 with disabilities/developmental delays and their families” (Sandall et al., 2005, p. 210). The literature suggests that culturally responsive EI providers should engage in continuous reflection and seek feedback from families and colleagues in order to assess the effectiveness of their practices (Barrera & Kramer, 2009; Gatti, Watson, & Siegel, 2011; Turnbull et al., 2011). Five of the six participants strongly supported the propositions underlying this assumption overall, while Christina only showed moderate support overall.

All six participants strongly supported the proposition concerning providers seeking feedback from families and colleagues following interactions and specifically stated that they sought feedback from both families and colleagues in their interviews. However, none of the participants spoke of utilizing formal or regularly scheduled reflection sessions or methods, as recommended by Stroud (2010) or Gatti and colleagues (2011). Participants instead indicated that they informally met with colleagues and asked for feedback during sessions with families. Three providers weakly to moderately supported the proposition concerning providers making regular time for reflection, with only Martha strongly indicating that she regularly made time for reflection, saying “I have to be very careful and very mindful about that and make sure that I make time” while two participants (Rose and Sarah Jane) did not give any evidence relevant to this proposition. This difference between recommended and actual practices may be due to several factors, including participants’ lack of knowledge of formal reflective processes and associated vocabulary, and lack of time and/or compensation for reflective practice meetings.

The participants all demonstrated a consciousness of self in their practice when relating their experiences and all spoke of seeking feedback from families and contacting other

professionals when they felt they needed assistance. These indicators point to the use of regular, ongoing informal reflection of their practices and in their practices, as opposed to formally set aside blocks of time dedicated to the purpose of reflective sessions which are most often suggested in the literature. The lack of a common or shared vocabulary with which to explicate reflective practices may also have impacted the ability of the researcher to more fully capture these practices by the participants. Participants often spoke of their reflection in terms of *thinking* about their experiences, described self-questioning they had engaged in, or would anecdotally discuss a challenge and implemented solution without discussing the informal reflection that occurred to facilitate the solution. Moving forward, it would be of interest to investigate informal reflective processes and the similarities or differences in their benefits to EI providers as compared to formal processes.

Four of the six participants indicated that they assigned importance to continuous self-assessment, with Sarah Jane and Christina both describing how they utilized online resources to target areas in which they perceived themselves as needing improvement; however Barbara and Donna provided no evidence for this proposition. Five of the six participants also strongly supported the proposition that providers evaluate the effectiveness of their interactions and practices through multiple measures, while Donna provided moderate support. All six participants spoke of using informal observations, progress towards family service plan goals, and family feedback to gauge effectiveness, while Sarah Jane and Barbara also mentioned using more traditional standardized assessments, such as the Hawaii Early Learning Profile. These findings suggest that while the participants actively seek out ways to determine and address their strengths and weaknesses as practitioners, they may not be doing so in a systematic manner.

Summary

Research Questions:

1. How do early intervention providers define, learn, and express usage of culturally responsive practices?
2. To what extent do their beliefs and self-reported behaviors support high-quality culturally responsive practices indicated in the literature?

Based on the results of this study, effective early intervention providers describe culturally responsive practices as ways of providing services which enable them to work effectively with families who differ from them culturally. All six participants spoke of open, respectful communication as a key component of working effectively with culturally diverse families and emphasized the importance of honoring family values and beliefs, even if they differed from the participant's own. Furthermore, all six participants reported usage of multiple culturally responsive practices on a regular basis. Five of the six participants reported receiving formal training pertaining to working with cultural diverse families; however all six participants reported that their primary means of learning about working with culturally diverse families was through interactions with the families themselves.

Findings from this study suggest that effective early intervention providers do utilize and support the culturally responsive practices identified in the literature base. All six participants' responses supported the four theoretical assumptions at a moderate to strong level of support and supported 12 of the 15 associated individual propositions. Four of six participants' responses supported the remaining three individual propositions. Data indicate that the participants consciously utilize culturally responsive practices as tools for effective provision of early intervention services to culturally diverse families.

Implications for Future Research

Limited research exists specific to EI provider experiences in providing services to culturally and linguistically diverse families. The findings from this study contribute to the literature base by providing information specific to effective EI providers' experiences in working with these families. However, in order to increase the evidence base regarding the efficacy of culturally responsive practices in EI service provision, additional research is required. One recommendation is to conduct a study utilizing observations of effective EI providers providing services following individual interviews to investigate the similarities and differences between their expressed and observed practices specific to cultural responsiveness.

The findings from this study suggest that culturally responsive practices are an integral part of providing effective EI services to culturally diverse families. However, additional research is needed in this area. It may be beneficial for organizations providing EI to utilize Goode's (1989/2009) Promoting Cultural & Linguistic Competency self-assessment checklist or a similar measure in order to gauge how often service providers report using culturally responsive practices. It would be interesting to utilize this data in tandem with family satisfaction and family outcome measures to investigate possible connections between these factors.

Finally, more research is needed to examine how different types of educational experiences impact the culturally responsive practices used by EI providers. Although this study investigated how EI providers learned to work with culturally diverse families it was on a small scale. Examining a larger population in greater depth would provide more information on how educational experiences pertaining to culturally responsive practices impact the service provision of EI providers. Also, additional research is needed for each specific assumption area, as well as

how each area intersects with and influences one another. These findings could help provide information as to how early intervention preparation programs and in-service professional development offerings could better design educational experiences to support development and use of culturally responsive practices.

Limitations

This study had several limitations. It utilized a small sample size (six), although this sample size is within recommended guidelines for Yin's (2009) multiple case study methodology. The sample was drawn from one geographic area and only two early intervention provision organizations. While this may be considered a limitation, it may also be considered a strength of the study in that all participants provide early intervention services in the same geographic area and are subject to the same policies, procedures, and requirements dictated by the state administering program. Additionally, they all have access to the same professional development offerings and state provided resources (such as translated materials) for culturally and linguistically diverse families. However, the purpose of Yin's multiple case study methodology is to generalize to a theory, not a population. In this case, a theory was developed and assumptions and propositions supported by the literature were identified, tested, and analyzed, thereby addressing internal validity for this study. The selection criteria, which were tightly defined and limited to highly effective early intervention providers, may have impacted the findings comparative to inclusion of a broader range of participants and therefore a broader range of issues. Also, I have a prior relationship (as a professional acquaintance) with three of the six participants, which was discovered once potential participant names were sent to me by the early intervention organizations. Possible bias was addressed by using member checks and external reviewers throughout the stages of data analysis. Furthermore, this study relied on data

collected concerning expressed practices which may differ from enacted practices (Gall, Gall, & Borg, 2007). The questionnaire is a self-report measure, which may be limited by recall bias, social desirability bias and errors in self-observation (Gall, Gall, & Borg, 2007). Delimitations included not addressing EI service providers who work in center-based or medical settings or providers who did not meet the criteria for highly qualified designated by the researcher.

Reflection on Methodology

The research questions for this study lent themselves in particular to Yin's (2009) systematic approach for conducting a credible and trustworthy case study enabling generalization of findings to theory. As such, it requires that the researcher focus on specific questions and narrowing of data collection to key information informing those questions to stay within the scope of the study (Yin, 2009). However, as data collection and analysis progressed, I found issues emerging from the data which could not be addressed within the scope of the study; for example, participant word choices which may indicate potential discord between expressed practices and frameworks of belief about cultural norms regarding child development and disability. The constraints of the methodology did not allow for exploration of these issues, which may have provided richer and more nuanced discourse of cultural beliefs, practices, and assumptions of participants.

Role of the Researcher

As the researcher and an early intervention provider in the same geographical area, I found it difficult not to provide my comments or remark on participant experiences. Specifically, when the participants expressed their challenges I found it difficult not to offer empathy or suggestions based on my own experiences as an EI provider, which were similar in many ways to those of the participants. I wanted to collaboratively problem solve and share

resources with them as a fellow professional. For instance, when Christina spoke of her challenges working with families in the deaf culture, thoughts of connecting her with Sarah Jane immediately entered my head. Knowing that I could not share this resource with her was frustrating to me. Listening to Martha explain how she gained the trust of families living with substance abuse, I questioned if my own practices with similar families had been as effective as hers and wished I could go into further depth on the subject. I found it difficult not to stray from the interview questions to pursue other topics that arose, such as Donna's frustration with the state organization's policies and procedures. As an early intervention provider who had encountered similar frustrations I was very interested in her thoughts and sharing my own. However, as the researcher that interest had to be tabled and my role as interviewer had to be dominant in my mind in order best capture participant experiences pertaining to the research questions addressed in this study.

REFERENCES

- Baghwanji, Y., Milagros Santos, R., & Fowler, S.A. (2000). *Culturally and linguistically sensitive practices in motor skills intervention for young children* (Technical Report). Early Childhood Research Institute on Culturally and Linguistically Appropriate Services. Retrieved from <http://clas.uiuc.edu/techreport/tech1.html>
- Bailey, D., Scarborough, A., Hebbeler, K., Spiker, D., & Mallik, S. (2004). *The National Early Intervention Longitudinal Study. Family outcomes at the end of early intervention*. NEELS Data Report 6. Menlo Park, CA: SRI International. Retrieved from <http://www.sri.com/work/publications/national-early-intervention-longitudinal-study-neils-family-outcomes-end-early-int>
- Bailey, D.B., Skinner, D., Correa, V., Arcia, E., Reyes-Blanes, M.E., Rodriguez, P., Vázquez-Montilla, E., & Skinner, M. (1999). Needs and supports reported by Latino families of young children with developmental disabilities. *American Journal on Mental Retardation*, 104(5), 437-451.
- Barrera, I., & Kramer, L. (2009). *Using skilled dialogue to transform challenging interactions: Honoring identity, voice, & connection*. Baltimore: Paul H. Brookes.
- Blue-Banning, M., Summers, J. A., Frankland, H. G., Nelson, L. L., & Beegle, G. (2004). Dimensions of family and professional partnerships: Constructive guidelines for collaboration. *Exceptional Children*, 70(2), 167-184.
- Bowers, C.A. (1984). *The promise of theory: Education and the politics of cultural change*. New York: Longman.

- Bowman, B. T., & Stott, F. M. (1994). Understanding development in a cultural context. In B. L. Malloy & R. S. New (Eds.), *Diversity and developmentally appropriate practices* (pp. 119-133). New York: Teachers College Press.
- Bradshaw, W.L. (2013). A framework for providing culturally responsive early intervention services. *Young Exceptional Children*, 16(1), 3-15.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Brooks-Gunn, J. (1995). Children in families in communities: Risk and intervention in the Bronfenbrenner tradition. In P. Moen, G. r. Elder, K. Lüscher (Eds.), *Examining lives in context: Perspectives on the ecology of human development* (pp. 467-519). American Psychological Association. doi:10.1037/10176-013
- Bruder, M.B. (2010). Early childhood intervention: A promise to children and families for their future. *Exceptional Children*, 76 (3), 339-355.
- Caesar, L.G. (2013). Providing early intervention services to diverse populations: Are speech-language pathologists prepared? *Infants & Young Children*, 26(2), 126-146.
- Casto, G. & Mastropieri, M. (1986). The efficacy of early intervention programs: A meta-analysis. *Exceptional Children*, 52(5), 417-424.
- Coleman, J. J. (2009). Treatment outcomes for culturally and linguistically diverse early intervention populations. *Perspectives on Culturally and Linguistically Diverse Populations*, 16, 60-78.
- Crais, E.R., Roy, V.P., & Free, K. (November 2006). Parents' and professionals' perceptions of the implementation of family-centered practices in child assessments. *American Journal of Speech-Language Pathology*, 15, 365-377.

- Cruickshank, D. (1985). Profile of an effective teacher. *Educational Horizons*, 90-92.
- Culp, A.M., & McCarthick, V. (1997). Chickasaw Native American adolescent mothers: Implications for early intervention practices. *Journal of Community Psychology*, 25(6), 513-518. Doi: 10.1002/(SICI)1520-6629(199711)25:6<513::AID-JCOP2>3.0.CO;2-Q
- Darling, S.M., & Gallagher, P.A. (2004). Needs of and supports for African American and European American caregivers of young children with special needs in urban and rural settings. *Topics in Early Childhood Special Education*, 24(2), 98-109.
- Day, J. C. (1996). *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin: 1995 to 2050* (P25-1130). U.S. Bureau of the Census, Washington, DC: U.S. Government Printing Office. Retrieved from <http://www.census.gov/prod/1/pop/p25-1130.pdf>
- DEC (2002). *DEC position statement: Responsiveness to family cultures, values, and languages*. Council for Exceptional Children, Division of Early Childhood. Retrieved from http://www.dec-sped.org/uploads/docs/about_dec/position_concept_papers/PositionPaper_Resp_FamCul.pdf
- DeGangi, G.A., Wietlisbach, S., Poisson, S., Stein, E., & Royeen, C. (1994). The impact of culture and socioeconomic status on family-professional collaboration: Challenges and solutions. *Topics in Early Childhood Special Education*, 14(4), 503-520.
- Doi:10.1177/027112149401400409
- Dempsey, I., & Keen, D. (2008). A review of processes and outcomes in family-centered services for children with a disability. *Topics in Early Childhood Special Education*, 28(1), 42-52. Doi: 10.1177/0271121408316699

- Dockrell, J. (1999). *Understanding children's language and communication difficulties*. London: Continuum International Publishing Group.
- Duchnowski, A., Kutash, K., & Oliveira, B. (2004). A Systemic Examination of School Improvement Activities that Include Special Education. *Remedial and Special Education*, 25(2), 117-129.
- Dunkin, M.J., & Biddle, B.J. (1974). *The study of teaching*. Oxford: Holt, Rinehart, & Winston.
- Dunst, C.J. (2009). Implications of evidence-based practices for personnel preparation development in early childhood intervention. *Infants & Young Children*, 22(1), 44-53.
doi: 10.1097/01.IYC.0000343336.34528.ea
- Dunst, Carl J. 2002. Family-centered practices: Birth through high school. *Journal of Special Education* 36(3), 139-147. doi: 10.1177/00224669020360030401
- Dunst, C. J., Hamby, D., Trivette, C. M., Raab, M., & Bruder, M. B. (2000). Everyday family and community life and children's naturally occurring learning opportunities. *Journal of Early Intervention*, 23(3), 156-169.
- Dunst, C. J., Trivette, C. M., & Hamby, D.W. (2007). Meta-analysis of family-centered help giving practices research. *Mental Retardation and Developmental Disabilities Research Reviews*, 13(4), 370-378.
- Durand, T.M. (2010). Celebrating diversity in early care and education settings: Moving beyond the margins. *Early Child Development and Care*, 180 (7), 835-848.
- Eggbeer, L., Mann, T.L., & Seibel, N.L. (2007). Reflective supervision. *Zero to Three*, 28(2), 5-9.
- Espe-Sherwindt, M. (2008). Family-centred practice: collaboration, competency and evidence. *Support for Learning*, 23(3), 136-143.

- Fults, R. M. (2011). A qualitative examination of the barriers and facilitators of family centered care and service provision in the natural environment. (3456336, University of Miami). ProQuest Dissertations and Theses, , 169. Retrieved from [http://search.proquest.com/docview/871638780?accountid=14745.\(prod.academic_MST_AR_871638780\)](http://search.proquest.com/docview/871638780?accountid=14745.(prod.academic_MST_AR_871638780)).
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007) Educational research: An introduction (8th edition). Boston: Pearson Education.
- Gardiner, E., & French, C. (2011). The relevance of cultural sensitivity in early intervention. *Exceptionality Education International*, 21(3), 34-49.
- Gatti, S.N., Watson, C.L., & Seigel, C.F. (2011). Step back and consider: Learning from reflective practice in infant mental health. *Young Exceptional Children*, 14(2), 32-45.
- Glover-Graf, N. M. & Blankenship, C. B. (2007). Mexican and Mexican Americans' beliefs about God in relation to disability. *Journal of Rehabilitation*, 73(4), 41-50.
- Goldstein, L.S. (2008). Teaching the standards is developmentally appropriate practice: Strategies for incorporating the sociopolitical dimension of DAP in early childhood teaching. *Early Childhood Education Journal*, 36(3), 253-260. Doi: 10.1007/s10643-008-0268-x
- Goode, T.D. (1989/2009). Self-assessment checklist for personnel providing services and supports in early intervention and early childhood settings. *National Center for Cultural Competence at Georgetown University Center for Child and Human Development*. Retrieved from <http://nccc.georgetown.edu/documents/ChecklistEIEC.pdf>
- Hall, E.T. (1977). *Beyond culture*. New York: Anchor.

- Hanson, M. J., & Lynch, E. W. (2013). *Understanding families: Approaches to diversity, disability, and risk* (2nd ed.). Baltimore, MD:Brookes.
- Harry, B. (2008). Collaboration with culturally and linguistically diverse families: Ideal versus reality. *Exceptional Children*, 74(3), 372-388.
- Harry, B. (2002). Trends and issues in serving culturally diverse families of children with disabilities. *Journal of Special Education*, 36(3), 132-140.
- Harry, B. (1992). Developing cultural awareness: Values clarification for early interventionists. *Topics in Early Childhood Special Education*, 12(3), 333-350.
- Heath, S.B. (1983). *Ways with words: Language, life and work in communities and classrooms*. Cambridge, MA: Harvard University Press.
- Hebbeler, K., Barton, L.R., & Mallik, S. (2008). Assessment and accountability for programs serving young children with disabilities. *Exceptionality: A Special Education Journal*, 16(1), 48-63. Doi: 10.1080/09362830701796792
- Jackson, C.W., Leacox, L., & Callender, M.F. (2010). Challenges to early intervention for English language learners: Perceptions of service providers. *Early Childhood Services*, 4(1), 29-53.
- Kalyanpur, M., & Harry, B. (1997). A posture of reciprocity: A practical approach to collaboration between professionals and parents of culturally diverse backgrounds. *Journal of Child and Family Studies*, 6(4), 487-509.
- Kummerer, S.E. (2012). Promising strategies for collaborating with Hispanic parents during family-centered speech-language intervention. *Communication Disorders Quarterly*, 33(2), 84-95. Doi: 10.1177/1525740109358453

- Lawlor, M. C., Mattingly, C.F. (1998). The complexities embedded in family-centered care. *The American Journal of Occupational Therapy*, 52(4), 259–267.
- Lazara, A., Danaher, J., & Goode, S. (2013). Part C infant and toddler program: Federal appropriations and national child count 1987-2013 (data chart). The University of North Carolina, FPG Child Development Institute, Early Childhood Technical Assistance Center. Retrieved from <http://ectacenter.org/~pdfs/growthcompPartC.pdf>
- Lee, H., Ostrosky, M.M., Bennett, T., & Fowler, S.A. (2003). Perspectives of early intervention professionals about culturally-appropriate practices. *Journal of Early Intervention*, 25(4), 281-295.
- Lee, H., Zhang, C., & Schwartz, B. (2006). Challenges of providing culturally and linguistically appropriate services: Perspectives of early intervention professionals in a Northeastern metropolitan city. *Multiple Voices for Ethnically Diverse Exceptional Learners*, 9(1), 1-11.
- Lynch, E.W., & Hanson, M. J. (Eds.). (2011). *Developing cross-cultural competence: A guide for working with children and their families*. Baltimore: Paul H. Brookes.
- MacKean, G., Thurston, W., & Scott, C. (2005). Bridging the divide between families and health professionals' perspectives on family-centred care. *Health Expectations*, 8(1), 74-85.
- Madding, C. C. (2000). Maintaining focus on cultural competence in early intervention services to linguistically and culturally diverse families. *Infant-Toddler Intervention* 10(1), 9-18.
- Maxwell, K.L., Lim, C-I, & Early, D.M. (2006). *Early childhood teacher preparation programs in the United States: National report*. Chapel Hill, NC: The University of North Carolina, FPG Child Development Institute.
- McBurney D.H., (1994) *Research Methods*. Pacific Grove, CA: Brooks/Cole.

- McWilliam, R. A. (2000). It's only natural... to have early intervention in the environments where it's needed. In S. Sandall & M. Ostrosky (Eds.), *Young Exceptional Children Monograph Series No. 2: Natural Environments and Inclusion* (pp. 17-26). Denver, CO: The Division for Early Childhood of the Council for Exceptional Children.
- Méndez Pérez, A. (2000). Mexican American mothers' perceptions and beliefs about language acquisition in infants and toddlers with disabilities. *Bilingual Research Journal*, 24(3), 277-294. Doi: 10.1080/15235882.2000.10162766
- Mills, A. J., Durepos, G., & Wiebe, E. (Eds.). (2010). *Encyclopedia of case study research*. Thousand Oaks, CA: SAGE Publications, Inc. doi: 10.4135/9781412957397
- Mitzel, H. E. (1960). Teacher effectiveness. In C. W. Harris (Ed.), *Encyclopedia of educational research* (3rd ed., pp. 1481–1486). New York, NY: Macmillan.
- Mogro-Wilson, C. (2011). Resilience in vulnerable and at-risk Latino families. *Infants & Young Children*, 24(3), 267-279.
- Odom, S.L., & Wolery, M. (2003). A unified theory of practice in early intervention/early childhood special education practices. *The Journal of Special Education*, 37(3), 164-173. Doi: 10.1177/00224669030370030601
- Olivos, E.M., Gallagher, R.J., & Aguilar, J. (2010). Fostering collaboration with culturally and linguistically diverse families of children with moderate to severe disabilities. *Journal of Educational and Psychological Consultation*, 20(1), 28-40.
- Parlakian, R. (2001). *Look, listen, and learn: Reflective supervision and relationship-based work*. Washington, D.C: Zero to Three.

- Paul, D., & Roth, F.P. (2011). Guiding principles and clinical applications for speech-language pathology practice in early intervention. *Language, Speech, & Hearing in Schools, 42*, 320-330. doi:10.1044/0161-1461(2010/09-0079)
- Puig, V.I. (2012). Cultural and linguistic alchemy: Mining the resources of Spanish-speaking children and families receiving early intervention services. *Journal of Research in Childhood Education, 26* (3), 325-345.
- Puig, V.I. (2010). Are early intervention services placing home languages and cultures ‘at risk’?. *Early Childhood Research and Practice, 12*(1).
- Rogoff, B. (2003). *The cultural nature of human development*. NY: Oxford University Press.
- Sandall, S., McLean, M. E., Santos, R. M., & Smith, B. J. (2005). DEC’s recommended practices: The context for change. In S. Sandall, M. E. McLean, & B. J. Smith (Eds.), *DEC recommended practices: A comprehensive guide for practical application in early intervention/early childhood special education* (pp. 19–26). Missoula, MT: DEC.
- Sexton, D., Lobman, M., Constans, T., Snyder, P., & Ernest, J. (1997). Early interventionists’ perspectives of multicultural practices with African-American families. *Exceptional Children, 63*(3), 313-328.
- Spicer, P. (2010) Cultural influences on parenting. *Zero to Three, 30*(4), 28-31.
- Strauss, A., & Glaser, B. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Stroud, B. (2010). Honoring diversity through deeper reflection. *Zero to Three, 31*(2), 46-50.
- Smith, B.J., Strain, P.S., Snyder, P., Sandall, S.R., McLean, M., Ramsey, A.B., & Sumi, W.C. (2002). DEC recommended practices: A review of 9 years of EI/ECSE research literature. *Journal of Early Intervention, 25*(2), 108-119.

- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: SAGE Publications.
- Sylva, J.A. (2005). Issues in early intervention: The impact of cultural diversity on service delivery in natural environments. *Multicultural Education*, 13(2), 26-29.
- Tellis, W. (1997). Introduction to Case Study. *The Qualitative Report*, 3 (2).
- Trivette, C.M., Dunst, C.J., Boyd, K., & Hamby, D.W. (1995). Family-oriented program models, helping practices, and parental control appraisals. *Exceptional Children*, 62(3), 237-249.
- Turnbull, A., Turnbull, R., Erwin, E.J., Soodak, L.C., & Shogren, K.A. (2011). *Families, professionals, and exceptionality: Positive outcomes through partnerships and trust*. Boston: Pearson.
- Wilcox, M.J., & Woods, J. (2011). *Language, Speech, and Hearing Services in Schools*, 42, 365-378.
- Withrow, R.L. (2004). Early intervention with Latino families: Implications for practice. *Journal of Multi-Cultural Counseling & Development*, 36(4), 245-256.
- Wu, P.R. (2009). Perception of early intervention family outcome: Inside Chinese-American families having children with disabilities. (Order No. 3365921, The University of Oklahoma). *ProQuest Dissertations and Theses*, , 193. Retrieved from <http://search.proquest.com/docview/304978804?accountid=14745>. (304978804).
- Xu, Y. (2007). Empowering culturally diverse families of young children with disabilities: The double ABCX model. *Early Childhood Education Journal*, 34(6), 431-437. Doi: 10.1007/s10643-006-0149-0
- Yin, R.K. (2009). *Case study research* (5th ed.). Thousand Oaks, CA: Sage.

Yin, R. K. (1994). *Case study research : design and methods / Robert K. Yin*. Thousand Oaks, CA : Sage.

Zahr, L.K. (2000). Home-based intervention after discharge for Latino families of low-birth-weight infants. *Infant Mental Health Journal*, 21(6), 448-463. Doi: 10.1002/1097-0355(200011/12)21:6<448::AID-IMHJ4>3.0.CO;2-#

APPENDICES

Appendix A: Expert Review of Propositions

Feedback from Expert Reviewer 1

Proposition	Feedback	Response
Assumption 1: Culturally responsive early intervention service providers have examined their own culture.		
1.1. Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, and acceptable behaviors.	Add functioning to family roles	Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles/functioning, and acceptable behaviors.
1.2. Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted.		
Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.		
2. 1 Providers demonstrate interest in	Change wording to 'in the design and delivery	Providers demonstrate interest in learning about the

learning about the cultures of families they serve and incorporate the knowledge into service provision.	of services’	cultures of families they serve and incorporate the knowledge into the design and delivery of services.
2.2 Providers are aware of intracultural differences among families with similar cultural characteristics and do not assume families subscribe to traditional cultural beliefs and practices.	Change the word characteristics to backgrounds and strike ‘traditional cultural’	Providers are aware of intercultural differences among families with similar cultural backgrounds and do not assume that families subscribe to beliefs and practices.
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.		
Assumption 3: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.		
3.1 Providers frame their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.	I am not clear conceptually what is intended in this proposition. I suggest that” frame “be replaced with “strengthens” and “suggestions “ be replaced with “recommendations”	Providers strengthen their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.		
3.3 Providers acknowledge any identified differences		

and explaining the basis of their professional interpretations and suggestions.

3.4 Providers collaborate with families to adapt interpretations and suggestions to honor the values of the family.

3.5 Providers recognize and utilize the culturally protective factors possessed by families receiving EI services.

Change ‘culturally’ to ‘culturally-based’

Providers recognize and utilize the culturally-based protective factors possessed by families receiving EI services.

Assumption 4:

Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.

4.1 Providers make time for reflection on a regular basis.

4.2 Providers seek feedback from families and colleagues following interactions.

4.3 Providers assign importance to continuous self-assessment.

4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.

4.5 Providers ascribe to the idea of the professional as a lifelong learner.

Proposition	Feedback	Response
Assumption 1: Culturally responsive early intervention service providers have examined their own culture.		
1.1. Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, and acceptable behaviors.		
1.2. Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted.		
Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.		
2. 1 Providers demonstrate interest in learning about the cultures of families they serve and incorporate the knowledge into service provision.	Change wording to "Providers can explicitly identify the values and beliefs that make up the cultural views of..." Rather than "demonstrate an interest in learning about the cultures ..." This allows you to more accurately determine whether the assumption is	Providers demonstrate interest in learning about the cultures of families they serve and can identify how they incorporate cultural knowledge into the design and delivery of services.

	reasonably met. It's one thing to be interested, quite another to do it!	
2.2 Providers are aware of intracultural differences among families with similar cultural characteristics and do not assume families subscribe to traditional cultural beliefs and practices.	Change the wording: "Providers can identify ..." rather than "are aware of..."	Providers can identify intracultural differences among families with similar cultural backgrounds and do not assume that families subscribe to beliefs and practices.
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.		
Assumption 3: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.		
3.1 Providers frame their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.	Change "suggestions" to "recommendations."	No change, as the family centered model emphasizes collaboration in developing strategies, as opposed to professional prescriptive recommendations.
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.	Change "suggestions" to "recommendations."	No change, as the family centered model emphasizes collaboration in developing strategies, as opposed to professional prescriptive recommendations.
3.3 Providers acknowledge any identified differences and explaining the basis of their professional interpretations and suggestions.	Change "suggestions" to "recommendations."	No change, as the family centered model emphasizes collaboration in developing strategies, as opposed to professional prescriptive recommendations.
3.4 Providers collaborate with families to adapt interpretations and suggestions to honor the		

values of the family.		
3.5 Providers recognize and utilize the culturally protective factors possessed by families receiving EI services.	Change 'culturally' to 'culturally-based'	Providers recognize and utilize the culturally-based protective factors possessed by families receiving EI services.
Assumption 4: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.		
4.1 Providers make time for reflection on a regular basis.	"Providers practice or engage in reflection ..." rather than "make time."	Providers engage in reflection on a regular basis.
4.2 Providers seek feedback from families and colleagues following interactions.		
4.3 Providers assign importance to continuous self-assessment.	"Providers routinely practice continuous self-assessment" rather than "assign importance."	Providers routinely engage in self-assessment.
4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.		
4.5 Providers ascribe to the idea of the professional as a lifelong learner.	"Providers believe a professional should be a lifelong learner" rather than "ascribe to the idea."	Providers believe that professionals should be lifelong learners.

Feedback from Expert Reviewer 3

Proposition	Feedback	Response
Assumption 1: Culturally responsive early intervention service providers have examined their own culture.		

1.1. Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, and acceptable behaviors.	Could consider adding beliefs about service providers (are they seen as experts? Respected? Not to be trusted?) Also about service provision? Its purpose (cure/fix a problem?)	Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, professional roles, and acceptable behaviors.
1.2. Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted.	And can articulate ways in which such frameworks differ?	Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted, and can articulate ways in which frameworks may differ.
Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.		
2. 1 Providers demonstrate interest in learning about the cultures of families they serve and incorporate the knowledge into service provision.		
2.2 Providers are aware of intracultural differences among families with similar cultural characteristics and do not assume families subscribe to traditional cultural beliefs and practices.	Change the wording: "Providers can identify ..." rather than "are aware of..."	Providers can identify intracultural differences among families with similar cultural backgrounds and do not assume that families subscribe to beliefs and practices.
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.		
Assumption 3: Culturally		

responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.		
3.1 Providers frame their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.		
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.		
3.3 Providers acknowledge any identified differences and explain the basis of their professional interpretations and suggestions.		
3.4 Providers collaborate with families to adapt interpretations and suggestions to honor the values of the family.	Wonder if you want to add something somewhere about collaborating with other professionals too – in order to honor values of the family?	Providers collaborate with families and other professionals to adapt interpretations and suggestions to honor the values of the family.
3.5 Providers recognize and utilize the culturally protective factors possessed by families receiving EI services.	Change ‘culturally’ to ‘culturally-based’	Providers recognize and utilize the culturally-based protective factors possessed by families receiving EI services.
Assumption 4: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.		
4.1 Providers make time for reflection on a regular basis.	"Providers practice or engage in reflection ..." rather than "make time."	Providers engage in reflection on a regular basis.
4.2 Providers seek		

feedback from families and colleagues following interactions.		
4.3 Providers assign importance to continuous self-assessment.	"Providers routinely practice continuous self-assessment" rather than "assign importance."	Providers routinely engage in self-assessment.
4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.		
4.5 Providers ascribe to the idea of the professional as a lifelong learner.	Maybe add by seeking out and participating in continuing education/training??	Providers believe that professionals should be lifelong learners and seek out new learning opportunities.

Appendix B: Case Study Protocol

Overview of the Project:

The purpose of this study is to investigate how early intervention providers define, learn, and express usage of culturally responsive practices, and to what extent do their beliefs and self-reported behaviors support high-quality culturally responsive practices indicated in the literature. The unit of analysis in this study is an early intervention provider deemed effective with families culturally different from them and the case to be studied is the same individual. An explanatory case study methodology with multiple-case (cross-case) analysis will be used (Yin, 2009). Participants will be recruited and purposively selected from a pool of early intervention service providers based on an outside liaison's knowledge and evidence of their past success with culturally and linguistically diverse families, with a target of between 6 and 10 participants. Potential participants will be invited by the researcher to take part in the study via email. The first 10 participants to respond affirmatively will be selected for the cases. Each participant will be asked to participate in an online questionnaire and one interview. Interview questions have been created based on research developed propositions and further probes for each participant will be developed following receipt of completed online questionnaires.

Field Procedures:

1. I will send each participant a link to the online questionnaire via email, along with an expression of thanks for participating in the study.
2. I will conduct descriptive data analysis of completed questionnaires, as described in further detail below.
3. I will conduct one individual interview with each participant. Structured interview questions have been created based on the research developed propositions and can be found below.

Each interview is expected to last approximately one hour and will be conducted at a time and place convenient for each participant.

4. Participant responses will be audiotaped by the research at the time of each interview and the research will take field notes during the interviews.
5. Interviews will be transcribed and study participants will be provided with the opportunity to examine the transcriptions for accuracy.

Data Analysis

For this study four levels of analysis will be conducted.

First analytical level

1. Online questionnaire responses: For each participant the researcher will conduct a descriptive analysis of data collected from questionnaire responses. The questionnaire items have three possible responses: A) Things I do frequently, or statement applies to me to a great degree; B) Things I do occasionally, or statement applies to me to a moderate degree; and C) Things I do rarely or never, or statement applies to me to minimal degree or not at all. All items are positively worded, so an 'A' response indicates a high usage of a specific culturally responsive practice, while a 'C' response indicates minimal to no use of the practice. In addition to these responses, the researcher will review the comment fields for descriptive responses to each item. Responses will be reviewed to determine if they support or negate correlated propositions.

Second analytical level

2. Interviews: The researcher and one trained independent reviewer will use the rating scale (Appendix E) to determine if the interview responses either support or negate the research based propositions (Duchnowski, Kutash, & Oliveira, 2004).

- a. The researcher and reviewer will be required to achieve a rate of agreement $\geq 80\%$. In the case where that rate of agreement is not achieved, the researcher and reviewer will meet to determine discrepancies in scoring and revise based on discussion and consensus.
- b. Participant responses will be matched to each proposition and rated on a scale ranging from +3 to +1 in support of the proposition; -3 to -1 in opposition to the proposition; and 0 in which the data neither supports or negates the proposition.

Third analytical level

3. Questionnaire and Interview: using Appendices E and F as guides the researcher and independent reviewer will utilize compare the questionnaire and interview findings with the research-based propositions in order to (a) determine if there are patterns in the culturally responsive practices of effective family-centered early intervention providers, and (b) to build a rich description of the experiences of these providers.
 - a. in order to ensure reliability, the same trained reviewer will compare participants' responses to the propositions using Appendices E and F, recording results on the pattern matching logic table (Appendix G). The reviewer and researcher will be required to achieve a rate of agreement $\geq 80\%$. In the case where that rate of agreement is not achieved, the researcher and reviewer will meet to determine discrepancies in scoring and revise based on discussion and consensus.

Fourth analytical level

4. A cross-case synthesis will be conducted. Once word tables are created, the researcher will be able to develop cross-case conclusions about the study.

Questions

Research Question:

1. How do early intervention providers define, learn, and express usage of culturally responsive practices?

This is a broad question which will explore the following:

- a. How do they conceptually define culturally responsive practices?
 - b. How do they learn culturally responsive practices?
 - c. How do they express usage of culturally responsive practices during their early intervention service provision?
2. To what extent do their beliefs and self-reported behaviors support high-quality culturally responsive practices indicated in the literature?

Structured Interview Questions:

-
1. How would you describe your job to someone not familiar with the early intervention system?
-
2. What do you feel are your most important responsibilities as an EI provider?
-
3. How do you develop goals and strategies with the families you serve? How do you negotiate differences of opinion during these interactions?
-
4. What do you do when you are feeling overwhelmed or uncertain of how to proceed in a situation with a family?
-
5. How do you keep up with changes in the field? In the types of families you serve?
 - knowledge, skills, and practices
 - models of service delivery
 - methods of assessment
 - state and federal regulations and requirements
-
6. How do you assess the effectiveness of your practices?
-
7. Describe the characteristics of the families you serve.
 - family size and family members
 - involvement of different family members
 - socioeconomic status (poverty, lower/middle/upper class)
 - ethnic and racial diversity
 - religious/non-religious
 - urban/suburban/rural
-
8. What similarities and differences have you encountered when working with families from
-

different cultural backgrounds?

9. Have you noticed any beneficial aspects or challenges that families seem to have from being part of a particular culture?

10. What would you say are the major components of your own culture?

11. How much of a role do you feel your culture plays in your service provision?

12. How much of a role do you feel the culture of families plays in your service provision?

13. How do you prepare to work with families who differ from you culturally?

14. What kind of educational preparation or training have you had in working with culturally diverse families? What do you wish you had learned?

15. Which are the most effective skills and practices you use when working with families who are culturally different than you? How do you know they are effective?

16. What challenges have you experienced when working with families who differ from you culturally? How did you navigate these challenges?

17. What do you consider your strengths in working with families? Your weaknesses? How do you use this knowledge?

Appendix C: Promoting Cultural and Linguistic Competency Checklist

*Items not used are stricken through

Self-Assessment Checklist for Personnel Providing Services and Supports in Early Intervention and Early Childhood Settings (Goode, 1989/2009)

Directions: Please select A, B, or C for each item listed below.

A = Things I do frequently, or statement applies to me to a great degree

B = Things I do occasionally, or statement applies to me to a moderate degree

C = Things I do rarely or never, or statement applies to me to minimal degree or not at all

PHYSICAL ENVIRONMENT, MATERIALS & RESOURCES

~~_____ 1. I display pictures, posters and other materials that reflect the cultures and ethnic backgrounds of children and families served in my early childhood program or setting.~~

~~_____ 2. I select props for the dramatic play/housekeeping area that are culturally diverse (e.g. dolls, clothing, cooking utensils, household articles, furniture).~~

~~_____ 3. I ensure that the book/literacy area has pictures and storybooks that reflect the different cultures of children and families served in my early childhood program or setting.~~

~~_____ 4. I ensure that table top toys and other play accessories (that depict people) are representative of the various cultural and ethnic groups both within my community and the society in general.~~

~~_____ 5. I read a variety of books exposing children in my early childhood program or setting to various life experiences of cultures and ethnic groups other than their own.~~

~~_____ 6. When such books are not available, I provide opportunities for children and their families to create their own books and include them among the resources and materials in my early childhood program or setting.~~

~~_____ 7. I adapt the above referenced approaches when providing services, supports and other interventions in the home setting.~~

~~_____ 8. I encourage and provide opportunities for children and their families to share experiences through storytelling, puppets, marionettes, or other props to support the "oral tradition" common among many cultures.~~

~~_____ 9. I plan trips and community outings to places where children and their families can learn about their own cultural or ethnic history as well as the history of others.~~

~~_____ 10. I select videos, films or other media resources reflective of diverse cultures to share with children and families served in my early childhood program or setting.~~

~~_____ 11. I play a variety of music and introduce musical instruments from many cultures.~~

~~_____ 12. I ensure that meals provided include foods that are unique to the cultural and ethnic backgrounds of children and families served in my early childhood program or setting.~~

~~_____ 13. I provide opportunities for children to cook or sample a variety of foods typically served by different cultural and ethnic groups other than their own.~~

~~_____ 14. If my early childhood program or setting consists entirely of children and families from the same cultural or ethnic group, I feel it is important to plan an environment and implement activities that reflect the cultural diversity within the society at large.~~

~~_____ 15. I am cognizant of and ensure that curricula I use include traditional holidays celebrated by the majority culture, as well as those holidays that are unique to the culturally diverse children and families served in my early childhood program or setting.~~

COMMUNICATION STYLES

_____ 16. For children and families who speak languages or dialects other than English, I attempt to learn and use key words in their language so that I am better able to communicate with them.

_____ 17. I attempt to determine any familial colloquialisms used by children and families that will assist and/or enhance the delivery of services and supports.

~~_____ 18. I use visual aids, gestures, and physical prompts in my interactions with children who have limited English proficiency.~~

_____ 19. When interacting with parents and other family members who have limited English proficiency I always keep in mind that:

_____ (a) limitation in English proficiency is in no way a reflection of their level of intellectual functioning.

_____ (b) their limited ability to speak the language of the dominant culture has no bearing on their ability to communicate effectively in their language of origin.

_____ (c) they may neither be literate in their language of origin nor English.

_____ 20. I ensure that all notices and communiqués to parents are written in their language of origin.

_____ 21. I understand that it may be necessary to use alternatives to written communications for some families, as word of mouth may be a preferred method of receiving information.

~~_____ 22. I understand the principles and practices of linguistic competency and:~~

~~_____ (a) apply them within my early childhood program or setting.~~

~~_____ (b) advocate for them within my program or agency.~~

~~_____ 23. I use bilingual or multilingual staff and/or trained/certified foreign language interpreters for meetings, conferences, or other events for parents and family members who may require this level of assistance.~~

~~_____ 24. I encourage and invite parents and family members to volunteer and assist with activities regardless of their ability to speak English.~~

_____ 25. I use alternative formats and varied approaches to communicate with children and/or their family members who experience disability.

~~_____ 26. I arrange accommodations for parents and family members who may require communication assistance to ensure their full participation in all aspects of the early childhood program (e.g. hearing impaired, physical disability, visually impaired, not literate or low literacy etc.).~~

~~_____ 27. I accept and recognize that there are often differences between language used in early childhood/early intervention settings, or at “school”, and in the home setting.~~

VALUES & ATTITUDES

_____ 28. I avoid imposing values that may conflict or be inconsistent with those of cultures or ethnic groups other than my own.

~~_____ 29. I discourage children from using racial and ethnic slurs by helping them understand that certain words can hurt others.~~

~~_____ 30. I screen books, movies, and other media resources for negative cultural, ethnic, racial, or religious stereotypes before sharing them with children and their families served in my early childhood program or setting.~~

~~_____ 31. I provide activities to help children learn about and accept the differences and similarities in all people as an ongoing component of program curricula.~~

~~_____ 32. I intervene in an appropriate manner when I observe other staff or parents within my program or agency engaging in behaviors that show cultural insensitivity, bias or prejudice.~~

_____ 33. I recognize and accept that individuals from culturally diverse backgrounds may desire varying degrees of acculturation into the dominant culture.

_____ 34. I understand and accept that family is defined differently by different cultures (e.g. extended family members, fictive kin, godparents).

_____ 35. I accept and respect that male-female roles in families may vary significantly among different cultures (e.g. who makes major decisions for the family, play and social interactions expected of male and female children).

_____ 36. I understand that age and life cycle factors must be considered in interactions with families (e.g. high value placed on the decisions or childrearing practices of elders or the role of the eldest female in the family).

_____ 37. Even though my professional or moral viewpoints may differ, I accept the family/parents as the ultimate decision makers for services and supports for their children.

_____ 38. I accept that religion, spirituality, and other beliefs may influence how families respond to illness, disease, and death.

_____ 39. I recognize and understand that beliefs and concepts of mental health or emotional well-being, particularly for infants and young children, vary significantly from culture to culture.

_____ 40. I recognize and accept that familial folklore, religious, or spiritual beliefs may influence a family's reaction and approach to a child born with a disability or later diagnosed with a disability or special health care needs.

_____ 41. I understand that beliefs about mental illness and emotional disability are culturally-based. I accept that responses to these conditions and related treatment/interventions are heavily influenced by culture.

_____ 42. I understand that the health care practices of families served in my early childhood program or setting may be rooted in cultural traditions.

_____ 43. I recognize that the meaning or value of early childhood education or early intervention may vary greatly among cultures.

_____ 44. I understand that traditional approaches to disciplining children are influenced by culture.

_____ 45. I understand that families from different cultures will have different expectations of their children for acquiring toileting, dressing, feeding, and other self-help skills.

_____ 46. I accept and respect that customs and beliefs about food, its value, preparation, and use are different from culture to culture.

_____ 47. Before visiting or providing services in the home setting, I seek information on acceptable behaviors, courtesies, customs, and expectations that are unique to families of specific cultural groups served in my early childhood program or setting.

~~_____ 48. I advocate for the review of my program's or agency's mission statement, goals, policies, and procedures to ensure that they incorporate principles and practices that promote cultural diversity, cultural competence and linguistic competence.~~

_____ 49. I seek information from family members or other key community informants that will assist me to respond effectively to the needs and preferences of culturally and linguistically diverse children and families served in my early childhood program or setting.

How to use this checklist: This checklist is intended to heighten the awareness and sensitivity of personnel to the importance of cultural diversity, cultural competence and linguistic competence in early childhood settings. It provides concrete examples of the kinds of practices that foster such an environment. There is no answer key with correct responses. However, if you frequently responded "C", you may not necessarily demonstrate practices that promote a culturally diverse and culturally competent learning environment for children and families within your classroom, program or agency,

Appendix D: Structured Interview Questions

1. How would you describe your job to someone not familiar with the early intervention system?

2. What do you feel are your most important responsibilities as an EI provider?

3. How do you develop goals and strategies with the families you serve? How do you negotiate differences of opinion during these interactions?

4. What do you do when you are feeling overwhelmed or uncertain of how to proceed in a situation with a family?

5. How do you keep up with changes in the field? In the types of families you serve?

- knowledge, skills, and practices
- models of service delivery
- methods of assessment
- state and federal regulations and requirements

6. How do you assess the effectiveness of your practices?

7. Describe the characteristics of the families you serve.

- family size and family members
- involvement of different family members
- socioeconomic status (poverty, lower/middle/upper class)
- ethnic and racial diversity
- religious/non-religious
- urban/suburban/rural

8. What similarities and differences have you encountered when working with families from

different cultural backgrounds?

9. Have you noticed any beneficial aspects or challenges that families seem to have from being part of a particular culture?

10. What would you say are the major components of your own culture?

11. How much of a role do you feel your culture plays in your service provision?

12. How much of a role do you feel the culture of families plays in your service provision?

13. How do you prepare to work with families who differ from you culturally?

14. What kind of educational preparation or training have you had in working with culturally diverse families? What do you wish you had learned?

15. Which are the most effective skills and practices you use when working with families who are culturally different than you? How do you know they are effective?

16. What challenges have you experienced when working with families who differ from you culturally? How did you navigate these challenges?

17. What do you consider your strengths in working with families? Your weaknesses? How do you use this knowledge?

Appendix E: Correlation of Questionnaire Items and Interview Questions with Research Based Propositions

Proposition	Questionnaire Item(s)	Interview Question(s)
1.1	28	10, 11
1.2	28, 33-46	11, 13
2.1	16, 17, 19, 47, 49	5, 7, 8, 9, 13
2.2	30, 33-36, 38-46	7, 8, 9
2.3	16, 17, 19, 34-36, 38-46	2, 5, 7, 8, 9, 15, 16
3.1	19, 20, 21, 25, 28	1, 3, 8, 9, 11, 12, 15
3.2	25, 28	3, 4, 8, 15, 16
3.3	25, 28	3, 4, 11, 12, 13, 16
3.4	17, 25, 28	1, 2, 3, 6, 15, 16
3.5	17, 25, 28	3, 8, 9, 15
4.1	-	3, 4, 6, 9, 13, 17
4.2	-	4, 6, 13, 15, 17
4.3	-	6, 13, 17
4.4	-	6, 13, 15, 17
4.5	16	2, 5, 6, 13, 14, 17

Appendix F: Interview Rating Scale

Participant: _____

Rater: _____

Assumption 1: Culturally responsive early intervention service providers have examined their own culture.

INSTRUCTIONS: Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, or -1. If the data have no evidence about the statement then circle no.	The data provide evidence that SUPPORTS the statement. The evidence is...			The data provide evidence that is AGAINST the statement. The evidence is...			The data DO NOT provide any evidence about the statement	TOTAL
	Strong	Moderate	Mild	Strong	Moderate	Mild	None	
Parts of the Proposition (Indicators):								
1.1. Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, professional roles, and acceptable behaviors.	+3	+2	+1	-3	-2	-1	0	
1.2. Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted, and can articulate ways in which frameworks may differ.	+3	+2	+1	-3	-2	-1	0	

Duchnowski, A., Kutash, K., & Oliveira, B. (2004). A Systemic Examination of School Improvement Activities that Include Special Education. Remedial and Special Education. 25(2), 117-129.

Participant: _____

Rater: _____

Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.

INSTRUCTIONS: Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, or -1. If the data have no evidence about the statement then circle no.	The data provide evidence that SUPPORTS the statement. The evidence is...			The data provide evidence that is AGAINST the statement. The evidence is...			The data DO NOT provide any evidence about the statement	TOTAL
	Strong	Moderate	Mild	Strong	Moderate	Mild	None	
Parts of the Proposition (Indicators): 2.1 Providers demonstrate interest in learning about the cultures of families they serve and incorporate the knowledge into the design and delivery of service provision	+3	+2	+1	-3	-2	-1	0	
2.2 Providers can identify intracultural differences among families with similar cultural backgrounds and do not assume that families subscribe to beliefs and practices.	+3	+2	+1	-3	-2	-1	0	
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.	+3	+2	+1	-3	-2	-1	0	

Duchnowski, A., Kutash, K., & Oliveira, B. (2004). A Systemic Examination of School Improvement Activities that Include Special Education. Remedial and Special Education. 25(2), 117-129.

Participant: _____

Rater: _____

Assumption 3: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.

INSTRUCTIONS: Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, or -1. If the data have no evidence about the statement then circle no.	The data provide evidence that SUPPORTS the statement. The evidence is...			The data provide evidence that is AGAINST the statement. The evidence is...			The data DO NOT provide any evidence about the statement	TOTAL
	Strong	Moderate	Mild	Strong	Moderate	Mild	None	
Parts of the Proposition (Indicators):								
3.1 Providers strengthen their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.	+3	+2	+1	-3	-2	-1	0	
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.	+3	+2	+1	-3	-2	-1	0	
3.3 Providers acknowledge any identified differences and explain the basis of their professional interpretations and suggestions.	+3	+2	+1	-3	-2	-1	0	
3.4 Providers collaborate with families and other professionals to adapt interpretations and suggestions to honor the values of the family.	+3	+2	+1	-3	-2	-1	0	
3.5 Providers recognize and utilize the culturally-based protective factors possessed by families receiving EI services.	+3	+2	+1	-3	-2	-1	0	

Duchnowski, A., Kutash, K., & Oliveira, B. (2004). A Systemic Examination of School Improvement Activities that Include Special Education. Remedial and Special Education, 25(2), 117-129.

Participant: _____

Rater: _____

Assumption 4: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.

INSTRUCTIONS: Rate the following parts of the proposition. If data support or are against the statement, rate the evidence as strong, moderate, or mild by circling either +3, +2, +1, -3, -2, or -1. If the data have no evidence about the statement then circle no.	The data provide evidence that SUPPORTS the statement. The evidence is...			The data provide evidence that is AGAINST the statement. The evidence is...			The data DO NOT provide any evidence about the statement	TOTAL
	Strong	Moderate	Mild	Strong	Moderate	Mild	None	
Parts of the Proposition (Indicators): 4.1 Providers engage in reflection on a regular basis.	+3	+2	+1	-3	-2	-1	0	
4.2 Providers seek feedback from families and colleagues following interactions.	+3	+2	+1	-3	-2	-1	0	
4.3 Providers routinely engage in self-assessment.	+3	+2	+1	-3	-2	-1	0	
4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.	+3	+2	+1	-3	-2	-1	0	
4.5 Providers believe that professionals should be lifelong learners and seek out new learning opportunities.	+3	+2	+1	-3	-2	-1	0	

Duchnowski, A., Kutash, K., & Oliveira, B. (2004). A Systemic Examination of School Improvement Activities that Include Special Education. Remedial and Special Education, 25(2), 117-129.

Appendix G: Pattern-Matching Logic

	Yes	No	Mixed
Assumption 1: Culturally responsive early intervention service providers have examined their own culture.			
1.1 Providers can explicitly identify the values and beliefs that make up their own cultural views, including beliefs about disability, developmental milestones, family roles, professional roles, and acceptable behaviors.			
1.2 Providers recognize that their cultural views represent only one of many frameworks through which actions and events can be interpreted, and can articulate ways in which frameworks may differ.			
Assumption 2: Culturally responsive early intervention service providers have and act upon knowledge of the cultural beliefs and practices valued by the families they serve.			
2.1 Providers demonstrate interest in learning about the cultures of families they serve and incorporate the knowledge into the design and delivery of service provision.			
2.2 Providers can identify intracultural differences among families with similar cultural backgrounds and do not assume that families subscribe to beliefs and practices.			
2.3 Providers make an effort to understand and value cultural beliefs and practices outside of their own and/or the dominant culture.			
Assumption 3: Culturally responsive early intervention service providers are competent in process-oriented practices that bridge the differences between cultures.			
3.1 Providers strengthen their interactions with families by recognizing cultural values embedded in professional interpretations and suggestions.			
3.2 Providers establish if families value their interpretations and suggestions or in what ways their views differ.			

3.3 Providers acknowledge any identified differences and explain the basis of their professional interpretations and suggestions.

3.4 Providers collaborate with families and other professionals to adapt interpretations and suggestions to honor the values of the family.

3.5 Providers recognize and utilize the culturally-based protective factors possessed by families receiving EI services.

Assumption 4: Culturally responsive providers engage in reflective practice involving continuous introspection and subsequent adjustments.

4.1 Providers engage in reflection on a regular basis.

4.2 Providers seek feedback from families and colleagues following interactions.

4.3 Providers routinely engage in self-assessment.

4.4 Providers evaluate the effectiveness of their interactions and practices through multiple measures.

4.5 Providers believe that professionals should be lifelong learners and seek out new learning opportunities.

Appendix H: Family Survey

Quality Assurance Survey Form

Date:

Name of Parent/Caregiver:

Name of Primary Service Provider:

This is a survey for families receiving support through the [REDACTED]. Your responses will help guide efforts to improve supports for children and families receiving services through our program. Please respond to each statement by circling one of the response options: (1) Strongly Disagree, (2) Disagree, (3) Agree, (4) Strongly Agree. In responding to each statement, think about your family's experience with early intervention supports.

Strongly Disagree *Disagree* *Strongly Agree*
Agree

The Early Intervention Provider

1. Encourages me to find a variety of positive interactions and learning opportunities within our home and community.	1	2	3	4
2. Communicates clear and complete information.	1	2	3	4
3. Works in partnership with me and my family to identify and address areas of need for my child.	1	2	3	4
4. Observes me and my child interacting together in our typical or preferred activities and routines and provides support rather than working directly with my child.	1	2	3	4
5. Helps us use the toys or materials within our play or caregiving routines rather than special toys, therapy or test materials.	1	2	3	4
6. Provides choices of informational and instructional support that matches how I prefer to interact with my child.	1	2	3	4

7. How long has your child been receiving early intervention?

- Less than 1 month
 1 to 6 months
 6 months to a year
 1 to 3 years
 Never

8. How often are your early intervention services?

- Less than 1 month
 1 to 6 months
 6 months to a year
 1 to 3 years
 Never

9. How long does your early intervention session last?

- Less than 1 month
 1 to 6 months
 6 months to a year
 1 to 3 years
 Never

Quality Assurance Survey Form Adapted with Permission from North Central Florida Early Steps, Department of Pediatrics, University of Florida (<http://www.myearlysteps.com>).

Appendix I: Results of Inter-Rater Reliability

Case	Assumption 1			Assumption 2			Assumption 3			Assumption 4		
	Researcher	Reviewer	Agreement	Researcher	Reviewer	Agreement	Researcher	Reviewer	Agreement	Researcher	Reviewer	Agreement
Rose	----	----	100%	----	----	100%	----	----	100%	----	----	100%
Barbara	----	----	100%	Prop 2 +2	Prop 2 +1	Agree +2 Wording of response	----	----	100%	----	----	100%
Martha	----	----	100%	----	----	100%	----	----	100%	----	----	100%
Sarah Jane	Prop 2 +2	Prop 2 +1	Agree +2 Wording of response	Prop 2 +1	Prop 2 0	Disagree +1 Wording of response	----	----	100%	----	----	100%
Christina	----	----	100%	----	----	100%	Prop 4 +2	Prop 4 +3	Disagree +2 Wording of Response	Prop 1 +1	Prop 1 0	Agree +1 Wording of response
Donna	----	----	100%	----	----	100%	Prop 1 +2	Prop 1 +1	Agree +2 Wording of response	Prop 5 +1	Prop 5 0	Agree +1 Wording of Response
Total Agreement			100%			94%			97%			100%

Appendix J: Institutional Review Board Approval



RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX (813) 974-7091

February 21, 2014

Wendy Bradshaw
Special Education
Tampa, FL 33612

RE: **Expedited Approval for Initial Review**

IRB#: Pro00015852

Title: Examining Experiences of Early Intervention Providers Serving Culturally Diverse Families: A Multiple Case Study

Study Approval Period: 2/21/2014 to 2/21/2015

Dear Ms. Bradshaw:

On 2/21/2014, the Institutional Review Board (IRB) reviewed and **APPROVED** the above application and all documents outlined below.

Approved Item(s):

Protocol Document(s):

[Study Protocol Version 1 2-17-14](#)

Consent/Assent Document(s)*:

[IC Adult Minimal Risk Version 1 2-17-14.pdf](#)

*Please use only the official IRB stamped informed consent/assent document(s) found under the "Attachments" tab. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s).

It was the determination of the IRB that your study qualified for expedited review which includes activities that (1) present no more than minimal risk to human subjects, and (2) involve only procedures listed in one or more of the categories outlined below. The IRB may review research through the expedited review procedure authorized by 45CFR46.110 and 21 CFR 56.110. The research proposed in this study is categorized under the following expedited review category:

(6) Collection of data from voice, video, digital, or image recordings made for research purposes.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.

As the principal investigator of this study, it is your responsibility to conduct this study in accordance with IRB policies and procedures and as approved by the IRB. Any changes to the approved research must be submitted to the IRB for review and approval by an amendment.

We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kristen Salomon', followed by a horizontal line.

Kristen Salomon, Ph.D., Vice Chairperson
USF Institutional Review Board