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Occupational therapists' attitudes toward family-centered care

Elise M. Bloch
Florida International University

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FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

OCCUPATIONAL THERAPISTS’ ATTITUDES TOWARD
FAMILY-CENTERED CARE

A dissertation submitted in partial fulfillment of the
requirements for the degree of

DOCTOR OF EDUCATION

in

ADULT EDUCATION AND HUMAN RESOURCE DEVELOPMENT

by

Elise M. Bloch

2004
To: Dean Linda Blanton  
College of Education

This dissertation, written by Elise M. Bloch, and entitled Occupational Therapists’ Attitudes toward Family-Centered Care, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

Janice Sandiford

Douglas Smith

Leonard B. Bliss, Major Professor

Date of Defense: July 30, 2004

The dissertation of Elise M. Bloch is approved.

Dean Linda Blanton  
College of Education

Dean Douglas Wartzok  
University Graduate School

Florida International University, 2004
DEDICATION

I dedicate this dissertation to my wonderful family. To my parents, Eleanor and Howard who have always been there for me and shown me continuous love and support. To my sister, Michele who I can count on at all times and has helped me see the light at the end of the tunnel. To Franklin and Sarah, blessings in my life who add joy and laughter to every day. To my Monday night group, who have been there with love and support throughout the journey.
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I wish to thank the members of my committee for their support and guidance throughout this process. Thanks to Dr. Douglas Smith for taking this on late in the game and giving me support and encouragement. Thanks to Dr. Jan Sandiford who has been a wonderful role model throughout my graduate studies and has supported me personally and professionally. Lastly, I was blessed with Dr. Len Bliss, my chair who helped me to think out of the box, set priorities and complete this process. He is a wonderful mentor and I am grateful for his compassion, guidance and support throughout this journey. An additional thanks to Dr. Linda Bliss for her editing assistance, APA knowledge, and support.
ABSTRACT OF THE DISSERTATION

OCCUPATIONAL THERAPISTS’ ATTITUDES TOWARD FAMILY-CENTERED CARE

by

Elise M. Bloch

Florida International University, 2004

Miami, Florida

Professor Leonard B. Bliss, Major Professor

The purpose of this study was to examine pediatric occupational therapists' attitudes towards family-centered care. Specific attributes identified by the literature (professional characteristics, educational experiences and organizational culture) were investigated to determine their influence on these attitudes. Study participants were 250 pediatric occupational therapists who were randomly selected from the American Occupational Therapy Association special interest sections.

Participants received a mail packet with three instruments to complete and mail back within 2 weeks. The instruments were (a) the Professional Attitude Scale (b) the Professional Characteristics Questionnaire, and (c) the Family-Centered Program Rating Scale. There was a 50% return rate. Data analysis was conducted in SPSS using descriptive statistics, correlations and regression analysis.

The analysis showed that pediatric occupational therapists working in various practice settings demonstrate favorable attitudes toward family-centered care as measured by the Professional Attitude Scale. There was no correlation between professional characteristics and educational experiences to therapists’ attitudes. A moderate
correlation \((r=.368, p<.05)\) was found between the occupational therapists attitudes and the organizational culture of their workplaces. A factor analysis was conducted on the organizational culture instrument (FamPRS) as this sample was exclusively pediatric occupational therapists and the original sample was interdisciplinary professionals. Two factors were extracted using a principal components extraction and varimax rotation, in addition to examination of the scree plot. These two factors accounted for 50% of the total variance of the scores on the instrument. Factor 1, called empowerment accounted for 45.6% of the variance, and Factor 2, responsiveness accounted for 4.3% of the variance of the entire instrument. Stepwise regression analysis demonstrated that these two factors accounted for 16% of the variance toward attitudes clinicians hold toward family-centered care. These factors support the tenets of family-centered care; empowering parents to be leaders in their child’s health care and helping organizations become more responsive to family needs.

These study findings suggest that organizational culture has some influence on occupational therapists attitudes toward family-centered care \(\left( R^2 = .16 \right)\). These findings suggest educators should consider families as valuable resources when considering program planning in family-centered care at preservice and workplace settings.
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CHAPTER I

INTRODUCTION

Family-centered care is a service delivery philosophy first mandated in 1986 for infants and toddlers that places families in partnerships with all professionals who work with their children. Over time family-centered care has become recognized as the best practice for individuals with disabilities – until they reach adulthood (Capitulo & Silverberg, 2001; King et al., 2003). Pediatric occupational therapists are health professionals who work with children with disabilities to enhance their independence in life skills. This research report examined attributes that impact their attitudes toward family-centered care.

In this chapter the context and background of the study will be introduced along with the theoretical framework, followed by the statement of the problem. This will be followed by the purpose and objective of the study and the research questions. Finally, the significance and delimitations will be discussed.

The Context of this Study

There have been dramatic changes in service delivery to children with disabilities and their families since the Individuals with Disabilities Education Act (IDEA) was enacted in 1975 (originally called the Education of the Handicapped Act, P.L. 94-142). This law was the first freestanding statute written specifically for children ages 3-21 who have disabilities. In 1986, Congress amended the Education of the Handicapped Act, adding Part H (P.L. 99-457). This amendment provided early intervention services (from birth through age two) for infants and toddlers and their families under Part H (renamed Part C under the 1997 reauthorization of the IDEA).
Part C called for a service delivery model known as family-centered care. The family-centered care philosophy maintains that families must be provided with full information about their child. Families are to be treated with respect and with care and are to be considered a partner with the professionals in the care of their young child (Bailey, Buysee, Edmondson, & Smith, 1992; Bruce et al., 2002). The law specifically supports family involvement at all levels of service delivery. Parents are to be full partners with professionals in decision-making about their children’s goals, treatment and education. The salient mandate of this law is for the development of individualized family service plans (IFSPs). This is the legal document that details which services will be provided to each young child during the school year. To develop this plan, parents and professionals together are to document the family’s priorities, concerns and resources related to the child’s development. The law also requires training opportunities for families, interaction opportunities for them with staff, and outreach plans to encourage greater parental participation. Parents are thus encouraged to participate actively in screening and assessment.

The growth of family-centered care philosophy has forced professionals to reexamine their attitudes and behaviors as family-centered care represents a different therapeutic philosophy than the more traditional framework when working with families. Prior to the family-centered care movement, professionals worked within a professional-centered model, where clinicians dictated the nature of parental involvement and viewed parents as being in a subordinate role. Traditionally, professionals saw themselves as the experts in all aspects regarding the child as this was how they were socialized in both their preservice education and their work environment. Consequently, the transition to
family-centered care has been challenging and barriers have become evident. This change requires educators responsible for instructing occupational therapists to better understand the therapists' current attitudes concerning family-centered care in order to develop appropriate (re)training.

Background of the Study

This section will discuss the role of the occupational therapist under the IDEA, trace the move to family-centered care practice, and discuss the barriers that impede successful family-centered care delivery.

The Role of the Occupational Therapist Under the IDEA

Since the advent of P.L. 94-142 in 1975, occupational therapists have become ubiquitous in school systems. Currently school systems constitute the largest employment setting for occupational therapists in the U.S. (American Occupational Therapy Association [AOTA], 1999). Services for children from birth until age three are provided in early intervention settings. These settings may be within school systems, hospitals, special education preschool settings, and/or private practices. After age three, services are provided through the children’s school systems. Occupational therapists are allied health professionals who use “occupation” (defined as purposeful and meaningful activity) to help individuals overcome obstacles and perform a variety of “occupational” roles in home, work, and community settings (Kielhofner, 1985).

Under P.L. 94-142, when working with children in school systems, the role of the occupational therapist as a related service provider has been to assist children with disabilities so they benefit from special education. Occupational therapists consult with
teachers regarding classroom adaptations; advise teachers of fine motor, sensorimotor, and visual perceptual strategies; and/or provide individual treatment for the children to facilitate their achievement of curriculum goals.

Under Part C of the 1986 IDEA, the focus of intervention has expanded and shifted from the child to the family. Occupational therapists are now primary service providers who offer services “that are designed to meet the developmental needs of the child... and the needs of the family related to enhancing the child’s development” (34 C.F.R. § 303.12). Recognizing the need for the change to family-centered care, the American Occupational Therapy Association, in its 1999 white paper on early intervention and preschool services stated:

The AOTA supports a family-focused approach to early intervention and preschool services. When families' needs are successfully addressed, children make more progress as well. Occupational therapy personnel must embrace opportunities to empower families to facilitate their children’s growth and development. Occupational therapy helps parents to develop and implement interactional strategies with their children and use effective coping strategies that meet the challenge of care giving and family life.... Occupational therapy personnel who work with young children and their families are responsible not only for providing standard practices generally accepted by the professional community, but also for striving to provide “best practice.” Best practice is at the forefront of knowledge and challenges current practices in an effort to more clearly delineate successful strategies that will optimize outcomes. Best practice enables professionals and families to consider unique options that might best fit family needs while continuing to protect the health and safety of the individual. (AOTA, 1999, p. 165) [Emphasis added]

The Transition to Family-Centered Care

As indicated above, since 1986 the shift in service delivery has slowly evolved from professional-centered to family-centered under Part C (P.L. 99-457). Family-centered care is based on the following assumptions: (a) families and children represent an interdependent system; (b) intervention is more powerful when families are involved
and supported; and (c) family members should have a voice and choice in all aspects of service provision. This evolution has been traced by numerous researchers (e.g., Lee, 1993; McBride, Brotherson, Joanning, Whidden, & Demmit, 1993; Petr & Allen, 1997; Rosenbaum, King, Law, King, & Evans, 1998).

Based on these assumptions, policy makers and researchers in the mid 1980s came to believe that the child-centered practices that characterized most early intervention programs of the time were inadequate because: (a) parents continued to be passive participants in developing services (Bailey, Buysee, Edmundson, & Smith, 1992); (b) services continued to be developed primarily for the child (Mahoney, Sullivan, & Dennebaum, 1990); and (c) professional attitudes continued to reflect the paternalistic and deficit-oriented parenting programs of the 1960s and 1970s (Dunst, Johnson, Trivette, & Hamby, 1991). Their support helped bring about the enactment of P.L. 99-457. However, even today professionals consistently identify and experience barriers that impede the successful implementation of family-centered care.

**Barriers to Family-Centered Care Practice**

Professionals in early intervention report three types of barriers to the family-centered care process: professional, system, and family (Bailey, et al., 1992; Bruce et al., 2002; Hamilton, Roach, & Riley, et al., 2003). Concerning the first barrier, family-centered care practices reflect a major change from previous practice and people are typically resistant to major changes in work demands (Bailey, et al.). The professionals working in these settings may feel unprepared because they do not possess adequate knowledge of family systems and/or services for families. Studies consistently found limited coursework in the area of early intervention across disciplines, minimal
opportunities to work with families of young children and a lack of interdisciplinary experience with other professionals for students enrolled in preservice personnel programs (Bailey, Palsa, & Huntington, 1990; Bailey, Simeonsson, Yoder, & Huntington, 1990; Godfrey, 2000; Hanson & Lovett, 1992; Stayton & Bruder, 1999).

In addition, professionals in early intervention usually consider themselves to be experts in child development. Family-centered care philosophy changes the role of the professional as the primary decision-maker; professionals are now partners with parents in the decision making process. Some professionals may view family-centered care as diminishing their role and feel threatened with this relinquishing of control.

Concerning the second barrier, professionals may embrace the family-centered care philosophy but work in a system that is resistant to change. Winton (1990, p.10) reports, "Real change will occur only when a comprehensive, long-term, systematic approach is taken and when those who will be affected by change participate in decisions about its implementation." Systemic change is difficult because there is some confusion regarding the implementation of family-centered care and the specific requirements for practicing professionals. This barrier to change is compounded because the law permits individual states to establish their own guidelines and training programs for early intervention practitioners.

Finally, family barriers include parents' lack of understanding of the early intervention process; limited means, time, and social support systems; and frequent life crisis situations (Bailey et al., 1992; Hamilton et al., 2003). Additionally, cultural issues may impede parental participation in the family-centered care process.
Research reports that the shift toward family-centered care has been a challenging one for professionals (Bruce et al., 2002). The therapist must take on a multi-faceted role as consultant, resource link, direct service provider, and advocate. Therapists are used to being in charge; whereas family-centered care puts parents in a more central role. Parents are now making decisions regarding goals and desires for their child. Research has demonstrated that therapists working in family-centered care organizations are more likely to engage in care and intervention that reflects this philosophy. There is evidence that the opposite is also true (e.g., Bruce et al., Eckle & MacLean, 2001). Researchers are continuing to explore stakeholders’ attitudes in order to facilitate positive attitudes and behaviors in the family-centered care milieu (Hamilton et al., 2003; Hostler, 1999).

Attitudes and Family-Centered Care Practice

Family-centered care requires partnerships between professionals and parents. Researchers have recognized that professionals’ attitudes are a salient component to consider in successful family-centered care intervention. Turnbull, Turbiville, and Turnbull (2000) report, “Perhaps the most important factor in making ...family-centered care a reality is that parents and professionals come to the relationship with attitudes which are open to a collaborative approach” (p. 645). Researchers in the fields of occupational therapy, social work, and psychology (e.g., Johnson, Cournoyer, & Fisher, 1994; Maluccio, 1979; Royeen, Cromack, DeGangi, Poisson, & Wietlebach, 1996) hypothesize that professionals’ belief systems strongly influence their behavior when working with families. Studies on the influence of attitudes on behavior may help us to understand the struggles of early intervention practitioners working toward family-centered care.
Researchers in the field of social psychology urge educators to ask the question, "Under what specific conditions will specific attitudes guide specific behavior?" To help researchers respond to the question, the theory of planned behavior developed by Ajzen (1991) considers three dimensions that will influence behavior: attitude, subjective norm and perceived behavioral control. Ajzen defines these three variables as follows:

An attitude toward the behavior refers to the degree to which a person has a favorable or unfavorable appraisal of the behavior in question. The subjective norm refers to the perceived social pressure to perform or not to perform the behavior. Perceived behavioral control refers to people's perception of the ease or difficulty of performing the behavior of interest. (p. 188)

Ajzen believes an individual's behavioral intention (motivation to engage in the behavior) is the single best predictor of the person's eventual behavior. The theory of planned behavior has been used by many researchers to understand health related behaviors (e.g. smoking cessation, breast feeding). These studies (e.g., Ajzen, 2001; Armitage & Conner, 2001) have been especially useful as the components of the theory have been significantly associated with predicting the desired behaviors. However, it has not been used in studies of family-centered care behaviors. The theory of planned behavior has great potential to help us better understand the relationship between occupational therapists' attitudes concerning family-centered care and their therapeutic behaviors.

Using the above theoretical framework requires a deep understanding of how attitudes are developed. Attitude formation theory identifies specific factors that influence one as one is forming attitudes (Oskamp, 1977; Shavitt & Brock, 1994; Zimbardo & Leippe, 1991). These factors can be understood in the context of family-centered care. They are: (a) direct experience (e.g. working with families); (b) personal
relevance to the attitude object (e.g. situations that clinicians can readily apply to their work); (c) normative group expectations (e.g. expected values and behaviors of peers); and (d) educational experiences (e.g. training in family-centered care). Shavitt and Brock report that these influences on attitudes will be most accurate when they are considered in a specific context and specific time frame. Attitude formation theory is well supported within the literature on factors influencing health professionals' attitudes.

Health professional literature reports that professionals’ attitudes and beliefs are acquired through numerous experiences including their preprofessional and professional socialization, their professional education, and their adoption of the norms of their organization’s culture (Brown, Humphry, & Taylor, 1997; Johnson et al., 1994; Maluccio, 1979; Royeen et al., 1996). Royeen et al. contend that clinicians’ attitudes influence the process of service delivery and that attitudes can change as the result of experience. Such experiences include pressure to perform a certain behavior being influenced by the rules (written and covert) and the mores of the organizational culture.

Statement of the Problem

Studies report that interdisciplinary pediatric clinicians feel that working with families is an important part of their role (Hamilton, Roach, & Riley, 2003; Rosenbaum et al., 1998). Research in family-centered care further suggests that clinicians’ attitudes toward such care will influence their professional behaviors (Bailey et al., 1992, Bruce et al., 2002). Although under Part C pediatric occupational therapists are primary service providers, at this time there is limited information concerning their attitudes toward family-centered care. Knowing more about these service providers’ attitudes is crucial to educators who provide them with appropriate preservice curricula and inservice training.
In reviewing what is known; attributes that have been consistently found in the literature to impact service providers' attitudes toward families can be delineated into three categories: (a) professional experiences, such as years of experience and current professional position (Gill, 1987, 1993); (b) education, including preservice training and fieldwork with families of children with disabilities (Dalley, 1991); and (c) organizational culture (Royeen, Cromack, Degangi, & Poisson, 1996). The relationships of these three variables (professional experiences, education, and organizational culture) to pediatric occupational therapists' attitudes toward family-centered care were explored in this study.

Purpose of this Study

This study explored the relationship of selected attributes (professional characteristics, education, and organizational culture) to attitudes occupational therapists hold toward family-centered practice. In addition, this study delineates which variables best predicted their favorable attitudes toward family-centered care. Findings will help early intervention educators comprehensively plan preservice and inservice training aimed at more widespread adoption of family-centered care.

Objective of the Study

This present study examined attitudes of pediatric occupational therapists working in various practice settings. The influence of specific attributes on their family-centered care attitudes was also investigated using the following research questions.

Research Questions

1. What are the attitudes of pediatric occupational therapists working in different practice settings toward family-centered care?
2. Which of the selected therapist attributes (professional characteristics, education, and organizational culture) is/are related to attitudes toward family-centered care?

3. Which of the selected therapist attributes is/are the best predictor(s) of attitudes toward family-centered care?

Significance of the Study

Study results will add to the limited body of research concerning health professionals’ attitudes toward family-centered care in educational settings. It will aid researchers’ understanding of the current gap between ideal practice and the reality of daily clinical practice. To help close this gap, findings will assist occupational therapy researchers and educators in planning and delivering occupational therapy programs at universities. Further, the results of this study will assist educators in schools in providing appropriate continuing education experiences to occupational therapy personnel.

Delimitations of the Study

This study is delimited in the following ways. This study only surveyed pediatric occupational therapists who are members of the American Occupational Therapy Association. Currently 30% of occupational therapists who practice in the United States are AOTA members (AOTA, 2001). This is important to note because occupational therapists who are not members of the AOTA may have different attitudes toward family-centered care. Second, the study instruments use self-report which may be limited as clinicians may respond on them in ways they consider to be socially desirable, rather than provide an accurate reflection of their true beliefs.
Organization of the Study

The remaining sections of this research report are divided into the following chapters. Chapter II contains the review of the related literature and the study's conceptual model. Chapter III discusses the research design and methods used. Chapter IV presents the findings, analysis, and evaluation of the data. Chapter V provides conclusions drawn from the results and follows up with recommendations for practice and future research.

Summary

Family-centered care is a mandated philosophy of service delivery to children that places parents in partnerships with clinicians in the care of their children. A shift to family-centered care requires occupational therapists to reflect on their attitudes and behaviors toward working with families. In previous studies, factors that have been found to influence attitudes of clinicians are professional characteristics, education, and organizational culture.

Occupational therapists are primary service providers for children with disabilities; however, research about their attitudes toward family-centered care is limited. This study examined pediatric occupational therapists' attitudes toward family-centered care. In addition, the attributes that influence their attitudes were investigated. This information will assist educators for program planning at the university and work place settings. Additionally, it will add to the current research base concerning attitudes of clinicians working in pediatric settings toward family-centered care.
CHAPTER II
LITERATURE REVIEW

This literature review first discusses the sociohistorical context of family-centered care, examining how its tenets have developed. This is followed by an examination of current challenges, including barriers to family-centered care and the changing role of the occupational therapist. The theories of attitude formation and planned behavior follow, with a discussion of their connection to this research study. Finally, relevant studies of attributes that impact attitudes are reviewed.

Sociohistorical Context of Family-Centered Care

During the past 20 years, early interventionists have struggled to agree on a definition of and parameters for the term “family-centered care” (Allen & Petr, 1995; Letourneau & Elliot, 1996; Rosenbaum, King, Law, King, & Evans, 1998). In addition, there is not unanimity as to the term itself. The literature of family-centered care has used several terms such as “family-focused”, “family empowerment”, and “family-referenced” to explain numerous service delivery patterns with common traits (Allen & Petr, 1995, p. 2). These traits refer to a philosophical approach to service delivery for children and their families. This approach is characterized by partnerships between service providers and families, provision of information so that families can make informed decisions, respectful and supportive care, and coordinated and comprehensive care (King et al., 2003). The move to this type of family-centered care has changed the nature of the parent-professional relationship.
The Shift Toward Family-Centered Care

Parent-professional relationships and services to children with disabilities have changed dramatically during the 20th century. In the early part of this century professionals believed parents were unable to care for children with disabilities and institutionalization was the norm. Parent advocacy groups formed in the 1940s and 1950s started an evolution aimed at enhancing service for children and, subsequently, parent participation in the service delivery process. Under the medical model prevalent in most hospital and institutional settings, professionals were considered the experts and treatment centered solely on the child. During the 1960s, social workers began using family systems theory (viewing children in context of their family) that focused on the interactions of family members.

Family systems theory looked at the characteristics and interactions of family members and how they impacted the overall family functioning. Adaptability and cohesion issues of families were considered under particular situations. For example, how would a family adapt to a having a child born with a disability? Would they able to work together during this time? Therapists began to understand that working under a family systems model in early intervention was crucial, as the child would be totally dependent on and influenced by family caregivers. Proponents of family systems theory believed that by facilitating the health of family members, families would be more capable of supporting their child's development. Simultaneously, researchers and professionals in the field began to include consideration of parents’ needs in the care of children with disabilities (Allen & Petr, 1995; Barnsteiner, Gillis-Donovan, Knox-Fischer, & McClindon, 1994). Families of children with disabilities came to realize they needed to
become politically active and lobby legislators to obtain funding for comprehensive services for their children.

*The Impact of the Individuals with Disabilities Education Act*

Thanks to the efforts of parent advocacy groups, in 1975 Congress passed P.L. 94-142, the *Education of All Handicapped Children Act* (later renamed the IDEA). This law mandated parental involvement in the education of children with disabilities. Parents were given the right to due process and the right to participate in individual education planning (IEP) meetings regarding their child's education. For the first time, parents were expected to be part of the decision-making process and to take on the roles of planners, coordinators, and advocates for their child's education (Bazyk, 1989). Parent training and home based programs became an integral component of early intervention programs during this time. Therapists worked under a helping model that left them in charge of most of the treatment decisions; parents were expected to assume the role of therapist at home (Bazyk, 1989). Parents who were unwilling or unable to assume this role were viewed by clinicians as non-compliant. While P.L. 94-142 began to recognize the importance of parents in the process, treatment and intervention for children with disabilities was still child-centered.

Through their writing and lobbying, Turnbull and Turnbull (1997) helped professionals reflect on how they viewed parent participation in the context of P.L. 94-142. They emphasized that parents of children with disabilities are a heterogeneous group with varying needs, strengths, and levels of availability. For example, families of children living in poverty may be dealing with day-to-day survival issues and unable to focus on the therapy issues of their child. When professionals are working with families, Turnbull
and Turnbull urged them to consider the needs of the entire family, not simply those of the child.

*Part C of the Individuals with Disabilities Education Act.* Recognizing the importance of early intervention, in 1986 P.L. 99-457 was introduced to include early intervention services for children with disabilities from birth through age two. Under P.L. 99-457, parents were considered partners with early intervention professionals in determining family priorities and issues. This law specifically mandated family-centered services and viewed parents as experts regarding their children. The Individualized Family Service Plan (IFSP) is the legal text that was first mandated by this legislation in order to document the family’s priorities, concerns and strengths. Parents and professionals began to develop these individualized plans to address individual families’ concerns about their children. Additionally, the law strengthened the role of parents in the organizational and decision-making processes for their children. This new legislation ignited discussions among stakeholders (researchers, parents, and clinicians) aimed at defining the parameters of family-centered care.

*Family-centered care benchmarks.* In 1987, the year after the passage of this momentous legislation, the Association of the Care of Children’s Health identified nine key elements that together defined family-centered care. These are listed below (Ahman, 1994, p. 114). Service providers should be:

1. [Recognizing that] the family is the constant in the child’s life, whereas the service systems and personnel within these systems fluctuate
2. Facilitating parent/professional collaboration at all levels of health care; care of an individual child; program development, implementation, and evolution; and policy formation
3. Honoring the racial, ethnic, cultural, and socioeconomic diversity of families
4. Recognizing family strengths and individuality and respecting different methods of coping
5. Sharing with parents, on a continuing basis and in a supportive manner, complete and unbiased information
6. Encouraging and facilitating family-to-family support and networking
7. Understanding and incorporating the developmental needs of infants, children, and adolescents and their families into health systems
8. Implementing comprehensive policies and programs that provide emotional and financial support to meet the needs of families
9. Designing accessible health care systems that are flexible, culturally competent, and responsive to family-identified needs.

Leaders in the field have accepted these parameters as benchmarks (Turnbull, Turbiville, & Turnbull, 2000). They are considered the standards of care for children with disabilities and their families, not only in the education settings but also in hospital care.

*Family-Centered Care in Medicine*

This examination of parent-professional relationships became critical in hospitals as medical technology advanced. Infant mortality decreased and many children were now able to survive complicated births and diseases, but had complex chronic medical needs. Nursing personnel began to reexamine the role of families in caring for their children in hospitals, especially in intensive care units. Nurses began to see the benefits of family-centered care for children and their families during hospitalizations. This standpoint was brought to national attention in 1985, by Dr. C. Everett Koop, Surgeon General of the United States who urged the medical and legislative communities to advocate for a family agenda (Hostler, 1999).

The Institute of Family-Centered Care (a private non-profit organization) was formed in 1993 to provide institutions with guidelines, information, and education about family-centered care. In the medical arena, nurses have led the movement toward advocating for family-centered care; bringing about major changes into maternity,
neonatal intensive care units and pediatric wards (Capitulo & Silverberg, 2001; McKlindon & Barnsteiner, 1999). Research has demonstrated that family-centered care in the hospital setting improves patient outcomes and decreases risk of medical errors (Hostler, 1999; McKlindon & Barnsteiner). Today, family-centered care principles have been mandated by the Commission for the Accreditation of Rehabilitation Facilities for inpatient rehabilitation, pain management, and health enhancement programs (Hostler). Family-centered care tenets were corroborated in the 2001 Crossing the Quality Chasm report developed by the Institute of Medicine (IOM).

The IOM’s report cites the need for “patient centeredness” to improve health care in the 21st century. Components of patient centeredness include: (a) respect for patients’ values, preferences, and expressed needs; (b) coordination of care; (c), information, communication and education; (d) involvement of family and friends; and (e) emotional support (Institute of Medicine, 2001, p. 50). The influence of family-centered care movement on mainstream medicine is evident from this report. As the century begins, occupational therapists continue to reflect on the impact of family-centered care tenets on their professional roles.

Infant Mental Health and Family-Centered Care

Krohn and Cara, (2000) reported that although the occupational therapy literature supports the tenets of family-centered care, current clinical practice still focuses on the child. Gilkerson and Stott (2000) have urged occupational therapists to consider the strategies of infant mental health practitioners (developmental psychologists, psychiatrists, and social workers) when working toward family-centered care. Practitioners in the infant mental health field consider their “client” to be threefold; the
parent, the child, and the parent-child relationship. These practitioners recognize that parents have important information about their child’s development. Similar to family-centered care, therapy is based on the needs and desires of the family. In support of this position Lieberman and Pawl (1993) state:

The therapist must genuinely conceptualize the effort as doing something with someone and not to someone. This respect for the wishes and capacities of a parent must be a defining factor of the therapeutic relationship... The parameters of respect, concern, accommodation and steady, basic positive regard become crucial as the containers of the entire process of treatment. (p. 430)

Under the infant mental health model the clinician wears many hats: direct service provider to the parent and the child, advocate for the family, and social worker. Intervention sessions typically occur in the family’s home which provides clinicians with valuable insight into the cultural beliefs and nuances of the family. Researchers advocate that therapy take place in this natural setting as doing so supports the tenets of family-centered care. Therapy conducted in the hospital settings may be limited by institutional mores and pressures that limit true family-centered intervention.

However, looking at the family as the unit of attention presents certain challenges for practitioners. Practice in family-centered care requires exceptional interdisciplinary teamwork because family issues may cut across numerous disciplines. Reimbursement issues can interfere with interdisciplinary collaboration and lead to “turf battles” between practitioners (Lawlor & Mattingly, 1998). Additionally, professional-parent boundaries may become blurred as parents come to view clinicians as friends or family members. Professionals also report feeling overwhelmed by the complexity of family problems, feeling unsure of their responsibility for addressing these issues, and unprepared by their training to competently address these issues (Brown, Humphry, & Taylor, 1997; Hanft &
Humphry, 1989; Humphry, Gonzalez, & Taylor, 1993; Lawlor & Mattingly). Researchers also report that professionals can become so entwined in the dynamics of the relationship with family members that they lose sight of treatment objectives (Lieberman & Pawl, 1993). Lastly, clinicians report difficulty in collaborating with families whose cultural background and family structures are different from their own (Humphry, 1995; Lawlor & Mattingly). The changing nature of the occupational therapist’s role with families has continued to be examined and explored by researchers and clinicians.

Current Challenges

Professionals have become involved in a philosophical shift from child-centered to family-centered interventions. Clinicians and educators involved in early intervention have continued to reflect on their attitudes, beliefs and actions when working with families (Anderson & Hinojosa, 1981; Bazyk, 1989; Lawlor & Mattingly, 1998; Schultz-Krohn & Cara, 2000). Though this shift to family-centered care has been beneficial to families, the impact on clinicians and organizations had not been sufficiently considered (Gilkerson & Stott, 2000; Barnsteiner et al., 1994). Though clinicians may hold favorable views toward family-centered care, they report they did not always demonstrate family-centered behavior (Bruce et al., 2002). Numerous researchers have discussed the barriers and challenges to family-centered care (e.g., Bailey et al, 1992; Schultz-Krohn & Cara; Lawlor & Mattingly). Typically, these barriers are categorized into system barriers and professional barriers.

System Barriers

Researchers in occupational therapy such as Lawlor and Mattingly (1998) contend that the shift to family-centered care demands dramatic organizational changes.
They state, “Practitioners face dilemmas in shifting to family-centered approaches because such a shift challenges many current institutional structures of practice and deeply held cultural assumptions about how health care is to be delivered” (p. 260).

Family-centered care requires “equal partnerships” between family members and practitioners; however the rules and culture of the institution may impede the care process. For example, therapy time may conflict with parents’ work schedules. Additionally, families have reported the paperwork required to obtain services is burdensome; and, more importantly, they prefer to provide information directly to the therapists in order to establish much needed rapport with professionals. These institutional factors hamper family members from participating in important decision-making. As Lawlor and Mattingly have noted:

Incorporation of a family-centered model of care into practices requires innovation at multiple levels, from individual practice to the broader structural and institutional practices (e.g., scheduling of appointments) that shape how individual practitioners perceive their role and the role of family in evaluation and treatment of children. (p. 261)

They understand that for family-centered care to be successful it requires the support of all individuals within the organization. The need for systematic change is also recognized by health policy organizations such as the Association for the Care of Children’s Health (ACCH) which has stated:

The [mandated] change in orientation must be reflected at all levels of health care: in providing care for an individual child; in developing community and hospital services, and in the charting of policy. Meaningful parent/professional collaboration at all levels is the driving force to ensure quality health care for children and their families. (1990, p.7)
The need for systematic implementation of family-centered care in an institution can be explained by the subjective norm component of the theory of planned behavior and the normative group expectation factor of attitude formation. Professionals need to be supported by their peers and the culture they work in if they are to carry out family-centered care behaviors. Recognizing this, practitioners in Canada have suggested adding an additional element to the ACCH list of family-centered care tenets deemed necessary to facilitate these changes. This new element calls for, “implementation of appropriate policies and programs that are comprehensive and provide emotional support to meet the needs of staff members” (Bruce et al., 2002, p. 411). This support may lessen the impact of barriers experienced by clinicians.

**Professional Barriers**

Family-centered care places greater demands on occupational therapists than child centered care. They must pay more attention to the priorities, needs, and psychosocial issues of families rather than focusing on the treatment of individual children. However, this is often problematic. Pediatric occupational therapists are most comfortable when providing “hands on” therapeutic treatment to the child. Yet family-centered care requires more. Their educational experience and training in working with families and related psychosocial issues is limited (Hanft & Humphry, 1989; Humphry & Link, 1990). In addition, dealing with the psychosocial issues of the family is not often considered to be “real work” by practitioners. Pediatric physical therapists reported in a recent study that clinicians were afraid their clinical skill level would diminish if they were asked to engage in more psychosocial domains (Litchfield & MacDougall, 2002). Additionally, the culture of our current day health care system negates psychosocial
involvement with families (Peloquin, 1993). Institutions and insurance companies reward therapists when their treatment involves hands on techniques on the child. However, in family-centered care attention to and discussion with family members regarding issues is imperative.

Well before family-centered care legislation was mandated, Anderson and Hinjosa (1981) recognized the importance of occupational therapists working with families as well as providing direct treatment to the child. As pediatricians Doherty and Baird demonstrated, the significance of family-centered care to pediatric medicine was becoming evident in 1986:

In particular, we believe that appreciating the family’s powerful role in “nuts and bolts” medical care is an essential developmental milestone on the path from a biomedical emphasis to interest and ability in engaging families on an affective level. Furthermore, we believe that appreciating the affective domain in families and in oneself is a sine qua non for understanding and practicing family systems interventions. (p. 155)

These professionals clearly recognized the need for family-centered care with children and the subsequent reexamination of clinicians’ attitudes and values in light of this new philosophy of service delivery.

*The Changing Role of the Occupational Therapist*

The role of the occupational therapist in family-centered care (Schultz-Krohn & Cara, 2000; Lawlor & Mattingly, 1998; Litchfield & MacDougall, 2002) is continually changing. In family-centered care the therapist’s role is multi-faceted: direct service provider, consultant, resource link, and advocate (Allen & Petr, 1995; Polatajko, 1994). Whereas parents are in the driver’s seat, making decisions regarding goals and desires for their child, therapists provide the input and therapeutic expertise that can make
these goals and desires a reality. This shift in power from professionals to families has been examined in the research (Brown, Humphry, & Taylor, 1997; Dunst, Johnson, Trivette & Hamby, 1991).

Dunst et al. (1991) delineated four types of service delivery models used in early intervention that can be looked at as a power-based continuum going from professional control to family control. In the first professional-centered model, professionals are the experts who make all decisions and who determine the needs of families from their own perspective. This type of practice continues to be seen consistently under the medical model. Under the family-allied model, the family is expected to implement the plans of the professionals, serving as agents to the professional. This is sometimes described as the helping model. In the family-focused model we see more collaboration between parents and professionals. Here both groups work together to define what families need and families are encouraged by professionals to seek out professional networks as needed. The family-centered care model places the family in charge of all aspects of service delivery and facilitates strengthening families. In this model, professionals are viewed as consultants to families.

In a related study, Brown et al. (1997) delineated a seven-level hierarchy through an exploration of the nature of family-therapist relationships and accompanying attitudes and beliefs held by clinicians. The role of the family in this hierarchy ranged from no family involvement (level 1) to the family as director of service (level 7). At the first level (no family involvement) therapists’ attitudes toward families reflect a biomedical approach. They see the family as interfering or distracting the client from treatment. Therefore intervention is focused solely on the client. In the second level (family as
informant), the therapist perceives limited family input as helpful regarding the client’s
history and current functioning. In the third level (family as therapist’s assistant), the
family is viewed as helpful in implementing home programs; however, the therapist is the
decision maker. At the fourth level (family as co-client) the therapist recognizes the
impact of the child with disabilities on the family. Therapists’ attitudes at this level
demonstrate empathy toward the family, with the therapist attempting to ameliorate the
stress on the family. Therapists working at the fifth level (family as consultant) view
families as important in having insight into what areas to work on with the client.
Attitudes of therapists working at the sixth level (family as team collaborator) support
families sharing power with clinicians. At this level therapists are understood to be there
to offer help to the family at the level requested by family members. The highest level
(family as director of service) places the family in the position of team leader. At this
level, therapists’ attitudes recognize the strength of families and that intervention may not
be directed solely toward the child. Researchers recognize that to achieve family-
centered care clinicians need to embrace partnerships with families.

In a study of the changing role of occupational therapists, Peloquin (1991)
indicates that therapists should assume the role of covenanter (a friend) to the family,

The professional steeped in the spirit of covenant regards his professional skills as
gifts to be shared with a community of others. Services rendered occur within the
context of a trusted relationship, and both parties receive as well as give...Within
the context of this friendship, the therapist collaborates and cooperates with the
patient’s self-actualization. (p. 19)

Peloquin supports the family-centered care tenet of empowerment, calling for clinicians
to work with families to provide them with the skills to advocate for their children. The
entire family might be said to be the patient in this case.
Likewise, in her plenary address to the national AOTA conference Polatajko (1994) supported the idea of families as decision makers. She challenged therapists to view the family/client as a prosumer, “a fusion of producer and consumer of occupational therapy services, keenly interested in exercising choice over the services that she or he accepts and accepting only those services that can be tailored to meet his or her needs” (1994, p. 592). Polatajko’s address directly supported family-centered care philosophy as it viewed families as directors of service for their children, making choices that work for their particular situation.

Summary of Sociohistorical Context and Current Challenges

This section has provided an overview of the movement toward family-centered care, barriers to family-centered care and current philosophical trends. Families of children with disabilities have been instrumental in influencing the way in which we (clinicians) work with this population. Thanks to their efforts, national legislation now mandates the tenets of family-centered care when servicing these families. However, in daily clinical practice there are impediments to successful family-centered care interventions. Leaders in the field are cognizant of these barriers and see the move to family-centered care as an evolutionary process. Hanson and Lynch (1990) have pointed out, “Like the children serviced in early intervention programs, the field is in its infancy. It is a time for learning, growing and developing the skills, competencies and attitudes that will shape the future” (p. 53).

Researchers have recognized that it is also imperative to consider the component of professionals’ attitudes in successful family-centered care interventions. “Perhaps the most important factor in making this aspect of family-centered care a reality is that
parents and professionals come to the relationship with attitudes which are open to a collaborative approach” (ACCH, 1990, p.9). The theories of planned behavior and attitude formation help explicate the relationship between their attitudes and their behaviors.

Attitudes and Behavior and their Relationship

Researchers have struggled with the relationship between attitude and behavior for decades (Shavitt & Brock, 1994). When considering attitudes we must consider how attitudes are created. Here we can turn to attitude formation theory, which identifies and examines the factors that influence the formation of attitudes (Ajzen, 2001, Fazio & Zanna, 1978; Zimbarde & Leippe, 1991).

Attitude Formation Theory

In this theoretical framework, the term attitude object is used to describe the construct or item that is being evaluating. An attitude is the evaluative judgment made of the attitude object. In family-centered care an example of an attitude object may be the communication style between the therapist and family. Family-centered care proponents advocate using parent-friendly language to aid in communication. If the therapist uses medical jargon to explain the child’s problems, the parent’s attitude toward this therapist’s (medical jargon) communication style may well be unfavorable.

Attitudes have cognitive, affective, and behavioral domains. The cognitive domain deals with the knowledge about the attitude object, the affective domain deals with the feeling about the attitude object and the behavioral domain is demonstrated by one’s behavior toward the attitude object. For example, in preservice training, students learn about very specific communication strategies for working with challenging
families. This knowledge is an example of the cognitive component of an attitude. A therapist's feeling of productivity and success after a situation with a difficult family is resolved exemplifies the affective domain. The therapist's behavior and demeanor toward that family demonstrates the behavioral domain.

Research suggests that direct experience and relevance of the attitude object, knowledge about the attitude object, and normative group expectations toward the attitude object are important components in attitude formation (Fazio & Zanna, 1978; Zimbarde & Leippe, 1991). This is how educational experiences occupational therapists obtain in preservice training prepare them for their fieldwork experience and eventual practice. If they work directly with families as they engage in the direct, relevant experience of providing therapy to young children, then they should develop feelings about their "working with families" comfort level. Additionally, if these attitudes are also modeled and supported by their peers they will meet normative group expectations. The combination of their knowledge base of family-centered care tenets and their feelings about working with families may be demonstrated in their behavior toward families.

Attitude formation theory has been useful in explaining health professionals' attitudes toward individuals with disabilities. Researchers investigating health students' attitudes toward individuals with disabilities have identified three factors that facilitate favorable attitudes: having contact with individuals with disabilities, participating in simulation exercises, and reading educational material on specific disabilities (i.e., Packer, Iwasiw, Theben, Sheveleva, & Metrofanova, 2000; Pernice & Lys, 1996; Rizzo & Vispoel, 1992; Stewart, 1990). These studies demonstrated the operation of the education, direct contact, and relevance components of attitude formation theory.
Although clinicians may hold favorable family-centered care attitudes they do not always engage in family-centered care behaviors. This problem is connected to the previously identified gap between “best practice” and current clinical practice. The theory of planned behavior can help clarify the problem. Ajzen’s (1991) *theory of planned behavior* can be used as a model linking attitudes to behavior. The theory of planned behavior delineates specific variables that mediate behavior and has been supported by empirical research in the area of health-related behavior (Armitage & Conner, 2001; Godin, 1996; Sheeran, Norman, & Conner, 2001). The theory of planned behavior is an extension of the theory of reasoned action (Ajzen & Fishbein, 1977), which was limited as it did not adequately predict behaviors over which people have incomplete volitional control. Ajzen addresses this limitation in his development of the theory of planned behavior (see Figure 1). This is relevant for family-centered care, as family-centered care settings have policies and training in place to facilitate family-centered care behaviors. This enhances the perceived behavioral control of the clinician who can participate in training and use these polices to engage in family-centered behaviors. Organizations that are not family-centered, unfortunately have inherent system barriers that impede the clinicians’ perceived behavioral control in family-centered behaviors. This point is especially relevant to this study because research has demonstrated that family-centered care behaviors require systematic support and collaboration with co-workers.
Family-Centered Care Attitudes

Family-Centered Subjective Norm

Perceived Behavioral Control toward Family-Centered Care

Intention to Perform Family-Centered Behavior

Family-Centered Care Behaviors

Figure 1. Theory of Planned Behavior - adapted from Ajzen (1991).
The theory of planned behavior views intention, one’s motivation to engage in a behavior as the most important predictor of behavior execution. Three variables directly influence intention: attitude, subjective norm, and perceived behavioral control. As previously defined in the description of attitude formation theory, attitude toward the behavior refers to the degree to which a person has a favorable or unfavorable evaluation of the behavior in question. Subjective norm refers to the perceived social pressure to perform or not perform the behavior. Perceived behavioral control refers to the perceived ease or difficulty of performing the particular behavior. For example, a tenet of family-centered care calls for parent-professional collaboration in writing the IFSP. However, if the clinician is working in a setting where collaboration with families is not the normative behavior, then the clinician’s (subjective norm) experience will not facilitate the tenet of parent-professional collaboration. The clinician may have favorable attitudes toward collaboration; however, her perceived behavioral control may be low if her training in collaboration skills is limited and her coworkers are not modeling this collaboration with families.

The theory of planned behavior postulates that behavior is a function of specific beliefs relevant to the behavior (Ajzen, 1991). Each variable in the theory has corresponding beliefs. Behavioral beliefs are assumed to influence attitudes toward the behavior. Normative beliefs influence the subjective norm variable and control beliefs support the perceptions of behavioral control. For example a therapist may believe in family-centered care intervention and support the idea that treatment should take place at home in the natural environment. However, if her supervisors don’t support this and want children coming to the early intervention center, then the (subjective norm component)
normative beliefs in the therapist’s workplace don’t support home services. Although the clinician may have positive attitudes toward family-centered care, the limitations to her actual control (administration dictating location of therapy services) will impede her ability to engage in this family-centered behavior.

Consider another family-centered scenario: a therapist working with a formerly drug addicted teenage mother and her child. An occupational therapist may have a behavior belief that all parents need to be treated with respect and compassion (a tenet of family-centered care). The normative beliefs of coworkers may be that drug addicted mothers should not be entitled to raise their children and don’t deserve respect. The therapist may therefore feel that this mother may not receive compassion and respect from the team — therefore impeding the collaborative process between parent and professionals. The subjective norm in this setting is not the same as the therapist’s. As she values peer approval, the norm may limit her ability to engage in family-centered care behaviors with that mother. In the above examples perceived behavioral control has a direct effect on behavior as the clinician has limited control (due to system constraints and subjective norms) to engage in the family-centered behaviors.

Ajzen compares the construct of perceived behavioral control to the self efficacy construct discussed by Bandura (Ajzen, 1991). Perceived behavioral control is believed to have both a direct effect on one’s behavior and an indirect effect on behavior through influencing one’s intentions (Madden, Elger & Ajzen, 1992). Individuals may possess favorable attitudes and subjective norms toward the behavior. However, if they believe they have limited ability to perform the behavior (limited perceived behavioral control), intentions to perform the specific behavior would be low. Indeed, research studies
support the idea that self-efficacy strongly influences one’s ability to perform a specific behavior (Madden et al., 1992).

When a specific behavior is clearly not under one’s volitional control or if one perceives that one has little control over the behavior, then one’s perceived control has direct impact on one’s behavior. For example, a clinician may be working in a setting that as policy does not offer working parents alternative times to attend team meetings with staff. The individual therapist has no control over this policy though she believes the team should be flexible and offer alternative times for meeting. This limitation in perceived control over meeting times will impact her behavior, as she will only offer parent-professional meetings during regular hours.

Application of the Theory of Planned Behavior in Education Studies

The theory of planned behavior has typically been applied to numerous health-related behaviors. However, several studies have also been conducted using this theory to explain professional behaviors of educators and health professionals (Breslin, Li, Tupker, & Sidao-Jarvie, 2001; King, et al., 2003; Theodorakis, Bagiatis, & Gourdas, 1995).

Theodorakis et al. (1995) applied the theory to investigate attitudes of Greek preservice physical education teachers toward teaching students with disabilities. As suggested by other researchers, to increase predictive validity the researchers added two exogenous variables (role identity and attitude strength) to the planned behavior model. Role identity looked at the hierarchy of roles one has in society (e.g., mother, daughter, teacher) that influence one’s self concept. Attitude strength encompassed numerous dimensions of attitudes (accessibility, certainty, direct experience, importance) that
express how strong or important an attitude is toward a given behavior. Specifically, they examined whether these variables would mediate the effects of attitude and subjective norm on students' intentions for teaching individuals with disabilities. Results indicated that these variables did mediate attitude and subjective norms. They suggested that once role identity becomes central to self-perception, the strength of students' general attitudes and norms in influencing behavioral intention is lessened. Additionally, students more confident in their attitudes concerning their teaching demonstrated stronger intentions to perform this behavior.

The role of academic preparation in fostering positive attitudes and role identity through educational experiences in working with students with disabilities was stressed. The authors urged continued studies looking at teachers' attitudes and the impact of education on these attitudes. Applying this to family-centered care, an occupational therapist whose educational experiences lead him to develop a professional role identity that embraces family-centered care principles will develop a strong perceived sense of behavioral control. This will enhance the likelihood of his engaging in family-centered care behavior.

In another study, following a continuing education seminar, researchers applied the theory of planned behavior to predict addiction counselors' use of a new treatment program (Breslin et al., 2001). They found that after the educational program, 56% of the variance in intention to use the new program could be attributed to attitudes, and social norms. An additional regression analysis demonstrated that intention and perceived behavioral control accounted for 19% of the variance for predicting the actual use of the new treatment program. These findings support the use of continuing education as a
venue to facilitate clinicians’ use of new treatment strategies when working with clients. This is an example of the clinical application of the theory of planned behavior to professional behaviors toward clients and therefore has relevance to this current study.

A study by King et al. (2003) examined perceptions concerning family-centered care practice of 324 service providers working in pediatric rehabilitation settings in Ontario, Canada. Sixty-one percent of these service providers reported having had training or education in family-centered care; however, the study did not describe the context of this training. King et al. found that 7% of the variance in service providers’ beliefs toward family-centered care was accounted for by training in family-centered care, respondents’ discipline, and years of experience. In addition, their study found that 7% of the variance of perceived self efficacy regarding family-centered care behaviors was related to the training received in family-centered care. These findings can be explained by the perceived behavior control component of the theory of planned behavior. If clinicians are given the educational resources and instruction to implement family-centered care, they feel more confident in their skills to do so and are more likely to engage in family-centered behaviors.

The findings from these studies are relevant to explaining therapists’ attitudes toward family-centered care. The limitations in personnel preparation in family-centered care have been well documented (Godfrey, 2000; Lynch & Hanson, 1993). Additionally, studies have shown that professionals recognize their lack of training and limitations when working with families (Bailey et al., 1992). The theory of planned behavior provides a theoretical basis for understanding the impact of therapists’ attitudes concerning family-centered care on their actual behaviors.
We as educators have the ability to impact changes in attitudes and perceived behavioral control by providing clinicians with appropriate education and training. Exploring occupational therapists' attitudes toward family-centered care is the focus of this present study, in the hopes of providing educators with information they can use in program planning at the university and work settings. The literature indicates that an organizational culture that is family-centered can have a positive impact on clinicians' family-centered care attitudes and behaviors. There is evidence that an family-centered normative group experience would support individuals and provide support for an environment that has mechanisms in place for educating professionals in family-centered care.

Studies of Attributes that Impact Attitudes of Health Professionals

In the literature three variables were consistently identified as having an impact on various allied health professionals’ attitudes toward the elderly and individuals with disabilities: (a) professional experiences, such as years of experience and current professional position; (b) education, including preservice training and fieldwork with families with members who have disabilities; and (c) organizational culture. These findings are discussed in detail below.

*Years of Experience and Current Professional Position*

Recent studies looking at professionals’ perceptions and practices toward family-centered care found no significant correlation between perceptions and practices of clinicians and the years of experience, and/or the health professional group (Bruce et al., 2002; Hemmelgarn, Gleeson, & Dukes, 2001; King, Law, King, & Rosenbaum, 1998). Earlier studies of health professionals demonstrated that experienced clinicians held more
positive attitudes toward families, the elderly and the disabled than novice clinicians (Dalley, 1991; Gill, 1987, 1993; Humphry, Gonzalez, & Taylor, 1992; Letourneau & Elliot, 1996). This discrepancy can be explained by the impact of mandated changes on university and organizational training. The earlier studies were conducted when PL 99-457 was first being applied to special education early intervention and administrators were struggling to comply with mandates and documentation. Family-centered care education at the workplace was centered on documentation issues for funding. These logistical restraints meant that any information concerning family-centered care tenets that students or clinicians received was perfunctory. In contrast, the later studies demonstrate how facilities have increasingly accorded a higher priority in training for implementation of family-centered care throughout the system.

As an earlier example, Gill (1987, 1993) investigated health professionals’ attitudes toward parent participation in the care of hospitalized children. She determined that novice clinicians had to focus primarily on treatment strategies and techniques they were still learning. However, experienced clinicians were comfortable in these skills, and could focus additionally on psychosocial issues of families. Small (1991), investigated nurses’ attitudes toward the elderly and found novice nurses to hold more negative stereotypes toward the elderly than experienced nurses. She suggests that time and experience working with this population reduces negative stereotypes. Researchers in Canada, looking at service providers’ beliefs about family-centered care reported that more years of experience related to stronger support for family-centered tenets (King, et al., 2003).
The finding that experienced clinicians held more positive attitudes than novice clinicians has been further explored by researchers. Researchers have proposed that experienced clinicians are more comfortable with their roles and therefore able to add on the task of empowering clients and their families. They have a multitude of experiences with families to draw upon and probable positive experience with these families. Additionally, family-centered care may not be as threatening to these individuals secure in their professional expertise. Letourneau and Elliot (1996) contended that experienced therapists were more confident, had more life experience and were able to see the ambiguities in particular family situations.

Professional position is also an important factor in considering attitudes toward family-centered care. Numerous studies suggest that professionals in higher-level positions such as head nurses and managers hold more favorable attitudes than individuals in staff positions (Bruce et al., 2002; Dalley, 1991; Gill, 1987, 1993; Humphry et al., 1992). More specifically, teachers and aides working in the trenches with a family may form different attitudes about that family than the administrator who is not involved with them on a daily basis. Daley found that administrators expressed greater empathy to clients than front-line practitioners. Gill reported that staff clinicians are typically overworked and feel overwhelmed with the demands of working with families (1987, 1993). Additionally, staff clinicians feel they lack the resources to assist families. Gill has noted that individuals in higher-level positions are more likely to have the experience and skills to work with families; in addition, they are no longer front-line practitioners. Researchers also suggest that as administrators don’t perform front line care, they may have fewer barriers to implementing family-centered care (Bruce et al.,
2002). For example, administrators don’t have large patient caseloads and may have more
time to spend with families; they also have more power in the system than staff clinicians
to get things done.

When considering years of experience and professional position, one can look
toward the “novice to expert” model of professional role development for nurses
discussed by Benner (1984). Benner identifies five levels of proficiency students pass
through: novice, advanced beginner, competent, proficient, and expert. During this
transition the individuals develop and fine-tune their ability to combine knowledge with
experience. They can learn to adapt and handle situations in various contexts. They
become reflective practitioners who can evaluate their behavior and change it as needed
during a particular crisis (Schon, 1987). In addition, they learn to prioritize, and to
recognize and appreciate the significance of critical cues.

Again, applying the theory of planned behavior to this model is beneficial. Based
on their numerous interactions with families throughout their work experience,
experienced clinicians demonstrate increased perceived control and confidence in their
abilities when compared to novices. They are able to listen intently and be responsive to
family situations in various contexts. They are more likely to have time to interact with
family, establishing bonds and favorable attitudes. Therefore, as they have more positive
attitudes and more perceived control they are more likely to exhibit family-centered
behaviors. Novice clinicians tend to be procedural, mechanical, and less confident in their
interactions with families. Their lower level of perceived control may negatively impact
their behavior.
Education

The context of the education and socialization the health professional receives is consistently cited as an important variable influencing attitudes in the literature (Dalley, 1991; Eberhardt & Mayberry, 1995; Gardner, 1994; King et al., 2003; Maluccio, 1979). When considering education, various facets have been empirically explored: (a) the level of education; (b) socialization aspects of education; (c) the type of preservice education experience (including didactic work in family-centered care, direct contact with families, and faculty role models); and (d) continuing education courses.

Level of education. Gill’s 1987 and 1993 studies of nurses and health professionals found that individuals with advanced degrees held more positive attitudes toward family-centered care than those with only bachelor’s degrees. In a related study, Humphry et al. (1992) investigated family involvement in occupational therapy. They reported that respondents with graduate training demonstrated more positive attitudes toward working with families than those with only undergraduate degrees. These results were corroborated in Letourneau and Elliot’s (1996) study of Canadian health care professionals. They found that health care professionals with graduate degrees had more favorable family-centered perceptions than those with undergraduate degrees. All of these researchers hypothesized that students involved in graduate training have the opportunity to specialize in areas related to family issues and are socialized in these programs to be more family-centered. In advanced degree occupational therapy programs, faculty have more flexibility in curricula. They are not constrained as they are in entry-level degree programs by national guidelines designed to prepare students to sit for the national certification exam.
One can also consider the impact of the IDEA on preservice programs to understand these findings. P.L. 99-457 requires comprehensive training for all professionals working with families of young children. Clearly, the implementation of this training has been difficult. Researchers in the area of preservice preparation report that across disciplines there is limited coursework and field experience in family-centered care (Bailey, et al., 1990; Hanft & Humphry, 1989; Hanson & Lovett, 1992; Humphry & Link, 1990). Many universities lack the resources to support faculty in training and establishing field placements for family-centered care (Klein & Gilkerson, 2000). A national survey of occupational therapy faculty found coursework hours in pediatric content varied from program to program, demonstrating the inconsistent content and levels of exposure to family-centered care principles that students received in their entry-level training. In addition, in their field work experiences, students received minimal interaction with families and children with disabilities (Humphry & Link). At the same time, 85% of programs surveyed by Humphry and Link indicated they needed additional training materials on infants with disabilities and working with families. Humphry and Link advise academic programs to determine whether or not their students are receiving adequate entry-level preparation in early intervention. They cite the need for creative strategies to provide more relevant family-centered care fieldwork and more continuing education in family-centered care.

Currently, there are only a small number of graduate programs (including occupational therapy graduate programs) in family-centered care. Recognizing the current limitations of undergraduate preservice education, the American Occupational Therapy Association (AOTA) recently mandated that all occupational therapy programs
become entry-level masters by the year 2007. In addition, the AOTA guidelines call for a
greater focus on family-centered care in pediatric curricula. These two steps will facilitate
greater training in family-centered care as preservice education is now approximately 1
year longer than in the past, and curricula now incorporate a greater family-centered care
focus than previously. The attention to clinical education was also cited in the recent
Institute of Medicine’s (IOM) report that calls for reform to the education of health
professionals that include interdisciplinary client-centered care (IOM, 2001).

Socialization. Socialization is best understood as an active process where the
individual has to respond to organizational and cognitive processes (Howkins & Ewens,
1991). This is an important component of the educational process for all professionals
(Howkins & Ewens; Lurie, 1991; Philpin, 1999). During their education and training,
socialization is the process by which new professionals adopt and adapt to the values,
behaviors, and attitudes necessary to assume their professional role (Howkins & Ewens).

The normative group expectation component of attitude formation theory and
subjective norm component of the theory of planned behavior help explain what happens
in socialization as the clinician learns and models behavior from coworkers.
Socialization is viewed as ongoing and fluid with three stages: pre-socialization, formal
socialization and post socialization (Howkins & Ewens, 1991). Pre-socialization concerns
the professional’s values and mores garnered from life experiences. The formal
socialization process take place at the preservice level, while post socialization happens
in the work environment.

When considering socialization, research supports the idea that educators are
important in fostering therapists’ positive attitudes toward families (Brown et al., 1997;
Johnson et al., 1994; Maluccio, 1979; Royeen et al., 1996). The impact of socialization on behavior is recognized in the theory of planned behavior in the subjective norm component where individuals seeks the approval of their peer groups when engaging in behaviors. Socialization is also a salient component of attitude formation theory that cites the importance of normative group expectations. We, as educators, are molding the social norms of our students. However, the literature in socialization cites a theory-practice gap between preservice socialization and workplace (post) socialization (Philpin, 1999). Research has demonstrated that socialization experiences in the work environment where the professional is employed are more powerful. (Howkins & Ewens, 1991; Philpin)

The importance of work place socialization was supported by Lurie (1981) who examined the relationship of socialization to role attitudes and behaviors of graduates of a nurse-practitioner training program. Graduates of the program were followed over a 1 year time frame through interviews and observations, as were a control group of nurses. Lurie contends that the primary socialization of nurses begins through the formal education process. However, the work setting, (the next socialization experience) is a more powerful determinant as it provides employment. Nurse practitioners in this study consistently exhibited socialization behaviors established in their training. However, if there was a conflict in roles or values, the work socialization process was stronger. Nevertheless, many respondents creatively managed to fulfill their perceived roles within the constraints of the hospital system. These nurses were reflective practitioners seeking viable alternatives based on their professional value system (Schon, 1987).
Interestingly, Lurie found role acceptance and functioning of the nurses were directly related to (subjective norm) attitudes and behaviors of coworkers in other disciplines. The theories of planned behavior and attitude formation help explain these findings, as nurses are more likely to exhibit particular behavior if they feel coworkers support it. Socialization is an ongoing process influenced by organizational culture, and by the education and experiences the individual brings to the table.

Researchers have suggested that health care practitioners who receive training in psychosocial issues and in working with families hold more supportive family-centered care beliefs than those who did not receive this training in their initial training experience (Bruce et al., 2002; Fisher & Peterson, 1993; King et al., 2003; Letorneau & Elliot, 1996). Studies have consistently found that social workers and nurses have demonstrated greater family-centered care beliefs than have physicians and physical therapists (King et al.; Letorneau & Elliot). Nurses and social workers are socialized and trained to look at the psychosocial issues of patients, viewing the patient in a holistic model at the preservice level. Recognizing this limitation in medical training, Fisher and Peterson urge medical school faculty to focus on the “personhood” of the client and not strictly the technical aspects of patient care. Attitude formation aids one’s understandings of this issue; education and direct experience (through fieldwork) at the university level provides nursing and social work students with a basic foundation in family involvement and collaboration. They are already predisposed to positive family-centered attitudes from their formal socialization when they enter a family-centered work environment.

Also concerning this issue, Clark (1997) examined the socialization process of physicians, nurses and social workers involved in gerontology. During their medical
training, physicians typically focus on treating the disease, not on dealing with the issues of the patient. The stress of residency programs further alienates physicians from their patients as they are trying to survive the demanding rigors of their program. Clark contends that all of these professions need to become “reflective practitioners” (Schon, 1987) and listen to the “voices” of their clients and to each other. Clark suggests changes in professional preparation such as having interdisciplinary course work, problem-based learning, and exposure to elderly people in community sites to facilitate this change.

Attitude formation theory supports these ideas as direct experience and education should indeed facilitate physicians’ development of positive family-centered care attitudes.

All of these studies are challenging health professionals to examine the ways we look at our clients. Why is this important? Researchers cite the importance of equal status relationships between professionals and families (Lyons, 1991; Wright, 1980) in facilitating positive attitudes. Although this has not been the reality in health care in the past, today it is widely recognized as a tenet of family-centered care. These studies in socialization are asking educators to set the appropriate context or lens through which to view clients as competent individuals with strengths and assets. According to Ajzen’s theory of planned behavior, educators have the opportunity to influence the subjective norm, attitude, and perceived behavioral control components of future health care professionals planned behavior.

In addition, since direct experience, education about working with families, and normative group expectations also influence attitude formation, educators can set the stage for this equal partnership by asking parents to serve as instructors and/or guest lecturers for relevant course work. Additionally, working with families in fieldwork or
classroom assignments would provide future occupational therapists with direct experience with families. While educators' model collaborating and learning from families of children with special needs, they can cultivate this equal status relationship for their students at the formal socialization level.

*Preservice educational experience.* Across disciplines, researchers report on the limitations of current preservice education for professionals involved in early intervention (Bailey et al., 1990; Hanft & Humphry, 1989; Hanson & Lovett, 1992; Humphry & Link, 1990). For example, Winton (1996) has stated:

Preparation quality early intervention personnel to serve young children with disabilities *and their families* is critical to the success of implementation of the Infant Toddler Program of The Individual with Disabilities Education Act. Put simply, the job is not getting done. An analysis of states’ progress toward implementing Part H suggests that personnel development is one of the areas in which the least amount of progress has been made. Not only are there shortages across multiple disciplines, existing early intervention personnel need retraining as roles and responsibilities are redefined and changed. (p. 56) [Emphasis added]

In support of Winton’s ideas, family-centered care proponents advocate for family participation in the education of health professionals. Numerous descriptive studies have discussed ways to include families of children with disabilities in the preservice education of professionals (Stayton & Bruder, 1999; Winton & DiVenere, 1995). Researchers have developed many successful programs in which parent educators teach allied health students (Capone & DiVenere, 1996; Godfrey, 1995; Winton & DiVenere). These researchers urge educators to provide students with experiences of family members in empowering roles such as teachers and mentors.

Additionally, researchers encourage parents to serve as advocates and to participate in the education of professionals working with their children. These studies
demonstrate the power of the education and direct experience components of attitude formation. Providing students with education in family-centered care principles delivered by parents of children with special needs facilitates the students’ development of positive attitudes toward these parents and their capabilities.

In one important empirical study on family-centered care teaching methods Snyder and McWilliam (1999) evaluated the efficacy of the Case Method of Instruction (CMI) in a preservice family-centered care course. Pre- and post test measures were used to evaluate attitudes and knowledge about family-centered care among 67 students. CMI was the predominant strategy used by the instructor. CMI is an ecological approach that examines all facets of the impact of a disability on a child and his or her family. Snyder and McWilliam found that students’ attitudes were more favorable to family-centered service delivery following CMI instruction. This study suggests that the CMI is a valuable teaching method.

As empirical studies examining the teaching of family-centered care were limited, empirical studies that have examined various teaching methods to improve attitudes of health professionals toward individuals with disabilities were also reviewed. It is reasonable to suggest that health professionals’ attitudes toward individuals with disabilities will be generalized to the individuals’ family members. Individuals are viewed in the context of their family systems. For this reason, such studies will now be discussed.

Numerous studies have investigated whether or not contact with individuals with disabilities could improve attitudes toward this population. Returning to attitude formation theory, Fazio and Zanna (1978) reported that attitudes formed through direct
behavioral interaction are stronger than attitudes formed through indirect, non-behavioral experience. Fazio and Zanna state:

The more that an attitude was based upon direct behavioral experience, the more likely it was that the attitude predicted subsequent behavior. This effect occurs because an attitude formed by direct experience is more confidently held and more clearly defined than one formed by indirect experience. (p. 399)

In support of these findings, Gething (1991) examined health professionals’ attitudes toward various types of disabilities. He found no significant difference in attitudes between the 12 different types of disability areas studied. However, prior and frequent contact with people with disabilities generated more positive attitudes than limited or no contact with people with disabilities. Together, their research supports the importance of providing students with the direct experience component of attitude formation to facilitate positive attitude towards individuals with disabilities and their families.

Direct contact was also studied by Stewart (1990) who examined the effects of diverse practica types on physical education students’ attitudes toward individuals with disabilities using a pretest/posttest design. While enrolled in an adaptive physical education course, students participated in a practicum of their choice with individuals who have disabilities. Stewart found statistically significant differences in posttest scores demonstrating more positive attitudes toward individuals with disabilities. Interestingly, the importance of context was supported in this study as students who choose a practicum experience with peers held more positive attitudes than the students who choose practica experiences with children or elderly people. The importance of direct experience was corroborated by Eberhardt and Mayberry (1995) who identified factors that influenced entry level occupational therapists’ attitudes toward persons with disabilities: contact
with persons with disabilities, the context of those contacts, and occupational therapy educational curricula. The context of the contact with individuals with disabilities was critical. Working with an individual in the helper-caregiver role was not as effective in improving attitudes as experience with an individual who has a disability as a peer, friend, or family member.

The importance of the context of contact with individuals with disabilities was supported by Lyons (1991) who reported that having equal status experiences during professionals' education was essential to foster positive attitudes and to enabling therapists to focus on abilities not limitations. Wright (1980) also emphasized training that focuses on abilities of persons with disabilities, not their limitations. Wright reported that when therapy students observe individuals with disabilities mastering daily challenges and coping with their disabilities their attitudes toward individuals with disabilities improve. She proposes that therapists may view individuals with disabilities through a coping versus a succumbing framework. The succumbing framework focuses on the difficulties and emotional “heartbreak” of the disability. In contrast, the coping framework encourages helping those with disabilities to seek solutions to their challenges and discover satisfaction in living. The disability is only one aspect of an individual’s life. Wright urges educators to develop instructional materials on disabilities using a coping framework context.

This issue is also relevant to parent-professional collaboration needed for family-centered care. Traditionally, parents were in a subordinate role receiving advice and instruction from professionals who viewed them through a succumbing framework. Family-centered care places parents on an equal status with professionals. Therefore,
allied-health faculty changing preservice education must acknowledge and present this equal status model (Winton, 1996).

Pernice and Lys (1996) conducted a study in which over an 8 month period, rehabilitation-counseling students were provided with personal contact with individuals with disabilities as guest speakers each week, didactic material regarding disabilities, and disability simulation activities. Agriculture students who were not provided these experiences served as the control group. Both groups completed an attitude scale pre- and post-treatment. Following the intervention, the post-treatment scores of the rehabilitation students were significantly higher than pre-test indicating more favorable attitudes toward persons with disabilities. Conversely, the control group demonstrated no change in their scores.

In another study examining attitudes toward disabilities, this time of Russian occupational therapy and nursing students, the authors compared the attitudes of nursing and occupational therapy students enrolled in a course designed to foster positive attitudes toward individuals with disabilities with a control group of nursing students who did not take the course (Packer, Iwasiw, Theben, Sheveleva, & Metrofanova, 2000). The course, entitled “Introduction to the Problems of People with Disabilities in Russia” was completely designed and implemented by members of a Russian disability advocacy group. The study found that students who took this class had significantly more positive attitudes toward individuals with disabilities than students in the control group.

In a related pre-test/post-test design study using similar teaching instructional methods, Rizzo and Vispoel (1992) examined the influence of an adaptive physical education course on physical education students’ attitudes toward individuals with
disabilities. Comparing their scores with those of a control group of students enrolled in a regular physical education course, the researchers found a statistically significant level of favorable change in attitudes by students enrolled in the adaptive physical education course. Teaching methods in the experimental class included: providing readings on disabilities, having students teach in special education settings, and having students participate in simulation experiences. The education and direct experience components of attitude formation theory support importance of the didactic coursework and student teaching provided to the experimental group. Not unexpectedly, the authors suggest that educational preparation and fieldwork experience are important factors that can influence preservice teachers' attitudes toward students with disabilities.

Continuing education. Researchers recognize the current limitations of preservice education and advocate for continuing education in family-centered care. Gessinger and colleagues have examined therapists' improvement in attitudes toward family-centered care following a workshop on family-centered care conducted by the AOTA (Gessinger, Humphry, Hanft, & Keyes, 1993; Humphry & Geissinger, 1993). Pre and post- workshop attitude scores were predicted and evaluated using a multiple linear regression model. A variety of professional and personal factors were considered. Professional factors included: years of experience, level of education, and professional role. Personal factors included: age, marital status, and parental status. Gessinger et al. found that only 23% of the variance in pre- response scores was explained by location of the workshop, years of pediatric experience, level of education, professional role, and employer. The researchers evaluated post- workshop attitude scores using pre-workshop attitude scores, and participants' evaluation of the workshop and previous personal and professional factors
from pre-workshop scores. Using a multivariate analysis, all of these factors combined accounted for a limited 53% of the variance in participants’ post-workshop attitude scores. Consistent with other studies, Gessinger et al. found professional factors were more important in influencing attitudes toward family-centered care than personal factors. Therapists with more years of experience working with children expressed greater family-centered attitudes than new clinicians. As with the studies of nursing students, individuals with advanced degrees expressed more favorable attitudes toward family-centered care.

Additionally, the location of workshops was significant in influencing scores. The authors found that respondents from states that were more successful in implementing Part C of P.L. 99-457 were found to have higher scores on the instrument. This finding demonstrates the influence of organizational culture on attitudes (Dalley, 1991).

A Canadian study (Bruce, et al., 2002) found a significant difference in family-centered care practices between hospitals. Staff employed in hospitals that had family-centered care policies and in-house training reported more family-centered behaviors than did those working at sites that did not have these mechanisms in place. In a related study, Caty, Larocque, & Koren (2001) found that Canadian nurses who had completed university studies or participated in continuing education courses had more positive perceptions of family-centered care than nurses who did not participate in either. Both of these studies support the importance of continuing education in the workplace for new attitude development.

The value of continued education experiences reported by the studies just described led researchers to contend that continuing education may provide the best
forum to impact attitudes and behavior (Geissinger et al., 1993). The context of this continuing education appears to be of great importance. When the education program is conducted at the work place, reflective of the relevance factor of attitude formation theory, it appears to be more valuable and applicable to work skills. Socialization theories also support these findings as (post socialization) educational experiences obtained in the work place are more powerful than preservice (formal socialization) educational experiences. In addition, continuing education courses use adult learning principles to facilitate learning; principles such as active student participation in applied and experiential exercises. Revisiting the subjective norm component of Ajzen’s theory, if the people you work with are supportive and demonstrate pro-family-centered attitudes and behaviors, you are more likely to model the same attitudes and behaviors.

Ajzen points out that through educational experiences one can clearly form one’s cognitive assumptions about attitudes. Affective components of attitude formation are activated through experiences with families in fieldwork and having families as teachers. Attitude formation theory also suggests that repeated experience with the attitude can predispose you to a similar attitude about the attitude object. Therefore, students who experience family-centered care in their formative socialization should be primed for favorable family-centered care attitudes in their work socialization.

The work of Mezirow (1990) and of Schon (1987) further enhances understanding of how educational experiences may influence attitudes. Mezirow believes adults reflect on their learning and gain new insights and perspectives. “The learner becomes aware of cultural assumptions governing the rules, roles, conventions, and social expectations which dictate the way we see, think, feel and act” (1990, p. 13). This idea is supported in
the qualitative studies on socialization of nurses in England of Fitzpatrick, While, and Roberts (1996) and of Howkins and Ewens (1999). In these studies, interviews of graduates of nursing programs describe the reflective learning that has occurred as a result of didactic work and field experiences. Additionally, they cite the importance of mentors in influencing their professional norms and attitudes.

Schon (1987) reports that it is through experience that professionals become reflective practitioners and come to intuitively know how to handle difficult situations. In addition, practitioners can reflect on their behavior and modify their behavior as needed. The theory of planned behavior helps explain this phenomenon, as educational experiences impact the subjective norm and attitude domains of one's planning for behavior. Applying this theory to family-centered care, if students are provided with educational experiences that support family-centered care tenets, they are more likely to develop attitudes, subjective norms, and perceived behavioral control that also support family-centered tenets. Thus we would expect a greater likelihood of family-centered behavior. In addition, if we are able to provide education opportunities to practicing clinicians then we can positively influence their subjective norms and perceived behavioral control domains in their daily clinical practice.

*Education and the gap between best practice and real practice.* Researchers have used the *dilemma of helping* theory to explain why so many therapists have not embraced family-centered care (Bruce et al., 2002; Dunst, Trivette, Davis, & Cornwell, 1988; Letourneau & Elliot, 1996). The dilemma of helping theory suggests that professionals come into conflict with the ubiquitous medical model when trying to implement family-centered care principles. In direct contrast to the medical model that advocates
professional decision-making and control, family-centered care advocates parent autonomy, decision-making, and empowerment. This conflict continues to be a serious barrier today.

Another explanation for the limited number of family-centered care interventions reported in the literature is that the current cohorts of clinicians working in early intervention were educated in preservice programs that lacked substantive training and education in family-centered care. Although family-centered care legislation has been mandated since 1986, the demanding regulations of P.L. 99-457 have taken precedence over the need to provide training to new personnel. Administrators have been very concerned with completing documentation to receive funding for programs and with dealing with staffing shortages. Therefore, training needs of current staff have often been neglected. Subsequently, researchers have reported discrepancies between ideal and typical practices in family-centered care (Bailey et al., 1991; Bailey et al., 1992; Bruce et al., 2002). Respondents in these studies have identified attitude, knowledge, and skill barriers that impeded their carrying out family-centered behaviors (Bailey et al., 1991, 1992; Bruce et al.). Professionals have consistently reported the need for more formal training in family-centered care curricula and for more practical experiences working with families (Roush et al., 1991).

As the cumbersome documentation issues of the law have become more manageable, researchers have recently begun to focus their efforts on curricula and training methods in family-centered care. The theory of planned behavior (Ajzen, 1986) aids our understanding of the current gap between attitudes and behaviors of early intervention practitioners. Clinicians who do not possess positive family-centered
attitudes, and have limited perceived behavioral control (due to limited training and normative group support) are less likely to demonstrate family-centered behaviors. Additionally, attitude formation theory points to the limitations in education, direct experience with families, and normative group support that professionals typically encounter today as they are forming their attitudes toward family-centered care. Returning to this study, attitudes of clinicians need to be investigated for educators to develop appropriate preservice curricula and continuing education programs in the workplace. Additionally, researchers need to understand the organizational culture of the workplace to tailor the curricula to best meet the needs of clinicians.

Culture of the Organization

Organizational culture refers to the norms, values, and assumptions that give meaning to the tasks and goals of a particular organization (Hemmelgarn, Glisson, & Dukes, 2001). Organizational culture can influence and determine the family-centered care attitudes and behaviors of staff working in an organization. Numerous studies (Bruce et al., 2002, Eckle & MacLean, 2001; Gessinger et al., 1993; Humphry et al., 1992; Hostler, 1999; Letourneau & Elliot, 1996), show that respondents working in family-centered care cultures, such as early intervention centers, display more family-centered attitudes than respondents working in non family-centered cultures. Several factors may explain this finding. The culture of the early intervention center is generally known for its supportive and caring environment toward families. It is not surprising that professionals working in an early intervention setting would develop a greater awareness of family-centered care principles. Although early intervention team members may bring with them differing ideologies, their common experiences working with family over time
leads them to support family-centered care tenets. These individuals share the work socialization process, which is typically very powerful (Lurie, 1981). The subjective norm component of the theory of planned behavior is a strong explanatory factor when considering the influence of organizational culture.

As previously discussed, for family-centered care to be successful there needs to be system and organizational support. Ten years ago Barnsteiner et al. (1994) pointed out:

Family-centered care was viewed primarily for its benefits to infants/children and families, with little consideration of how this would affect the staff and what institutional supports were needed. There was no attention to what skills, supports and resources staff members would need to enable them to provide family-centered care. There was no attention to the skills managers needed to assist staff members. (p. 36)

Unfortunately, aside from a few innovative pediatric hospitals, this situation has not changed significantly. This is so because the support of family-centered care in different settings can only be facilitated through the organizational culture of the particular facility.

Numerous studies, specifically in the nursing field discuss the importance of organizational culture in the successful implementation of family-centered care in various settings. These studies describe the systematic and carefully constructed planning that takes place; and the importance of on-the-job education of all personnel that is needed for successful implementation. For example, two institutions are consistently cited for their exemplary implementation of family-centered care tenets: the Children’s Hospital of Philadelphia, Pennsylvania and Kluge Children’s Rehabilitation Center of Richmond, Virginia (Hostler, 1999; McKlindon & Barnsteiner, 1999). Both centers rigorously assessed their organizations’ needs and planned systematic changes to move from a child-
centered to a family-centered institutional model. In both facilities this required extensive work over a 6 year period. All levels of employees were involved, and family input was critical to the process. Parents participated on advisory boards, teaching boards, and family-to-family support teams. Program assessment included using parent satisfaction instruments, internal reviews and accreditation related surveys. These organizations realized that they needed to develop a uniform socialization process toward family-centered care for their staff in order to change attitudes and behaviors.

In nursing research, one study examining the impact of emergency room culture on family-centered care behavior of the emergency room staff found that family-centered care constructs were influenced by culture and not by personal and professional variables. (Hemmelgarn, Glisson, & Dukes, 2001). The researchers conducted studies at four urban emergency rooms in Tennessee. Interviews and questionnaires were conducted at these sites. They found that emergency room personnel working in facilities that emphasized and supported family-centered care demonstrated and valued both family-centered care attitudes and behaviors. They suggested that organizational culture strategies that support staff are essential for successful family-centered care intervention. Strategies such as psychosocial support for staff, on-the-job training and administrative leadership were suggested by the authors to be efficacious in creating such a culture.

In a related study, Eckle and MacLean (2001) reported that emergency rooms with family-centered care policies and in-house training were more likely to have personnel engage in family-centered behaviors. As the theory of planned behavior posits, if health professionals feel supported by their administrators (subjective norm component) and the hospital has the tools in place to facilitate family-centered care
(perceived behavioral control), then these professionals are more likely to demonstrate family-centered care behaviors.

The importance of organizational culture in determining the attitudes of nursing professionals working in early intervention has been well documented (Bruce et al., 2002; Caty et al., 2001; Capitulo & Silverbery, 2001; Eckle & MacLean, 1999). However, more studies on the importance of organizational culture and early intervention in less documented educational settings need to be conducted. When considering the special education early intervention environment, the context can become more complex. Some of this complexity is related to systemic and professional barriers. Early intervention programs are housed in various facilities and cultures. Typically, they are under an educational framework, with interdisciplinary team members coming from numerous therapeutic subcultures. Often, depending on the state, early intervention services are provided through homecare agencies or non-profit organizations such as Easter Seals or school systems. A recent qualitative study in Australia (Litchfield & MacDoughall, 2002) investigated perceptions concerning family-centered care of physical therapists who work in community-based practice. Therapists reported numerous policy and organizational constraints that limited their family-centered behavior. The authors recommended investigating how the organization can support family-centered care practice in this environment.

This scarcity of research in organizational culture and early intervention special education has been recognized by leaders in the field. Shelton (1994) provides possible explanations for this situation:
It is important to note there are far more programs working to operationalize and evaluate family-centered care than appear in the extant literature. There are a number of reasons for this, including the fact that program evaluation that may be sufficient for continuation funding may have other methodological shortcomings which preclude the data from being published in more rigorous journals. There is a need for both a forum and for program descriptions with a good qualitative evaluation as well as a push for programs to strengthen evaluation methodologies to include not only qualitative but quantitative data. In other cases, service providers and families may be so busy implementing the program and searching for continuation funding that publicizing results becomes a low priority. (p.436)

Shelton continues with a call for more research. “Large scale, programmatic research examining all the elements is needed as well as more specific research examining which approaches are best for which children and which families” (p. 436).

*Attributes that Impact Attitudes Section Summary*

This section reviewed the literature on variables that influence people’s attitudes toward individuals with disabilities. These variables included their: professional characteristics, education, and organizational culture. Education has been found to be a key factor and the context of that education needs to be considered. Preservice family-centered care education is currently very limited and the current cohort of therapists frequently lack skills needed for successful family-centered intervention. Continuing education may be an appropriate remedy; however, at this time empirical studies in this area are too limited to comment more forcefully on the effectiveness of such efforts. Studies do suggest education received in a work setting that supports family-centered care would be valuable. This finding can be explained through the use of attitude formation theory, which says that direct experience and personal relevance to the attitude object impact attitude formation (Zimbardo & Leippe, 1991). Socialization theory also helps explain these finding, as the work culture exerts stronger influence on the
professional than does the person’s preservice university culture (Howkins & Ewens, 1991; Philpin, 1999).

The literature points out that it is important to understand the specific types of educational experiences that are needed to successfully influence therapists’ attitudes. Studies have shown that role-playing, simulation exercises and didactic presentations are useful in changing attitudes (Pernice & Lys, 1996; Rizzo & Vispoel, 1992). However, the literature consistently demonstrates that direct experience with individuals with disabilities can have positive impact on attitudes toward the disabled (Eberhardt & Mayberry, 1995; Packer et al., 2000; Stewart, 1990). The context of the contact is critical. Ideally, the contact should be based on the professional and the parent having equal status and utilizing the coping framework (Wright, 1980). These findings have direct relevance to therapists’ attitudes toward family-centered care and support for family-centered care tenets. There is evidence that exposure to families and inclusion of families in curriculum development fosters positive attitudes. Numerous position papers discuss parent-faculty collaboration, but empirical studies are lacking. It is widely believed that practitioners have been overwhelmed by the demands of programs and have little time to conduct studies designed for peer-reviewed publication. There is a striking lack of efficacy studies concerning methods for teaching about family-centered care.

The literature cites the importance of establishing a family-centered care culture in the work setting. Studies in nursing suggest that the impact of organizational culture on family-centered care attitudes and behaviors must be considered (Bruce et al., 2002; Caty et al., 2001; Hemmelgarn et al., 2001). Numerous studies have reported the successful
implementation of family-centered care tenets in nursing, but the literature in the early intervention special education setting is limited.

Chapter Summary

This review of the literature has provided the reader with the sociohistorical context to understand the movement toward family-centered care. In light of federal legislation, professionals have had to shift from a professional-centered framework to a family-centered care framework. There are several powerful professional and system barriers that impede successful family-centered care process. Nevertheless, the role of the occupational therapist is changing, and must continue to change for more widespread successful implementation of family-centered care intervention.

The theories of planned behavior and attitude formation helped establish the theoretical framework for this current study. Exploration of occupational therapists’ attitudes toward family-centered care is needed to for educators to plan appropriate programs in family-centered care at the university and work environments. The literature consistently reported three variables that impact attitudes. These variables are the individual’s: (a) professional characteristics; (b) education experiences; and (c) organizational culture. The impacts of these attributes on occupational therapists’ attitudes were examined in this current research study.
CHAPTER III

METHODS

This chapter will present descriptions of the population of interest in this study, the sample of participants and how it was selected, and the instruments used for the collection of data. Additionally, the procedures used to obtain the data for this study will be discussed. Finally, it will describe the statistics that were used to analyze the data in order to answer each of the three research questions.

Participants

The population of interest in this study was pediatric occupational therapists practicing in the United States. According to the American Occupational Therapy Association 2000 Member Compensation Survey (AOTA, 2001), the current median age of the typical occupational therapist is 39 years, with 11.6 years of experience. Sixty two percent of AOTA members hold a Bachelor’s degree in occupational therapy, 34% hold a Master’s degree. For this study, a sample of 250 participants was selected from the population using mailing lists of AOTA pediatric special interest groups. A systematic sampling was employed through a computer program (done by the AOTA) with no duplication of participants in the groups. A response of 120 participants was required to allow for two-tailed tests of differences between two groups with a standardized effect size of .25 and a power of .80 at \( \alpha = .05 \).

Instrumentation

In this study three instruments were used to collect the data: the Professional Attitude Scale (Royeen et al., 1996), the Professional Characteristics Questionnaire, and the Family-Centered Program Rating Scale (Murphy & Lee, 1991). The Professional
Attitude Scale provided information about the attitudes of the participants in response to the first research question. The remaining two instruments provided information about the attributes that impact attitudes in response to the second and third research questions. Each instrument will now be described.

*Attitude Toward Family-Centered Practice*

The dependent variable in the study was attitude toward family-centered practice as measured by participants’ scores on the Professional Attitude Scale (see Appendix A). The Professional Attitude Scale was developed to examine the quality of parent-professional relationships. Royeen et al. (1996) devised different scales for professionals and for parents. This study used only the professional scale because parents’ attitudes were not part of this study. The test authors further identified domain specifications and a taxonomy for this scale. They chose the tripartite classification structure of attitudes focusing on the behavioral, cognitive, and feeling components of attitudes identified by Kothandapaia (1971). In this instrument, participants respond to a series of 61 statements using a four point scale ranging from strongly disagree (1) to strongly agree (4).

Royeen et al. (1996) operationally defined attitude toward the individual family service plan (IFSP) process to be the summative scale score, representing the total of all three components of a subject’s attitude toward the IFSP process (Royeen et al., 1996). Therefore, a high score suggests more positive, favorable attitude while a low score represents an unfavorable, negative view of the IFSP process.

Test items were subject to a scale construction process developed by DeVellis (1991) with factor analysis of items and validity checks by internal and external reviewers. Following pilot testing of the scales, equivalent forms of the scales were
developed. Internal consistency of the professional scales was between .93 and .94. Alternate form reliability between equivalent forms ranged from .89 to .94. T-tests between the scores of the different professional forms showed no significant differences.

**Professional Characteristics**

The Professional Characteristics Questionnaire is a seven item survey developed by this researcher to identify the values of the variables reported in the literature to impact attitudes of clinicians concerning families of children with disabilities (see Appendix B). As noted in the literature review, three independent variables impact clinicians' attitudes toward family-centered care practice: (a) professional experience, (b) education, and (c) organizational culture.

*Professional experience.* When considering professional experience, there are two variables that are consistently cited in the literature. First, as the number of years of experience in the field increases, typically so do clinicians' positive attitudes toward clients and their families (Dalley, 1991; Gill, 1987, 1993; Humphry, Gonzalez & Taylor, 1992; Letourneau & Elliot, 1996). In this study, the questionnaire directly asked for both clinicians' years of experience working in early intervention and their years of experience working with the general pediatric population.

Second, the literature reports that professional position is related to clinicians' attitudes. Typically, individuals in supervisory or higher level positions demonstrate more family-centered attitudes than those in staff positions (Dalley, 1991; Gill, 1987, 1993; Humphry et al., 1992). Therefore, the type of the position held by the clinician was used as a variable.
Education. For this study, the respondents' exposure to instruction and fieldwork in family-centered care was investigated in order to determine if they were related to their attitudes toward this type of care. Two types of time frames for these experiences were investigated. First, older clinicians were more likely to have been trained prior to the federal mandate to provide family-centered care. Therefore respondents were asked to indicate their ages and how long they had been in practice both in early intervention and in pediatric therapy.

The second type of time frame concerned the specific points in their training during which clinicians experienced family-centered therapy course or field work and the nature of that experience. The literature reports that individuals with graduate degrees hold more favorable family-centered attitudes than individuals with only undergraduate degrees (e.g., Dalley, 1991; Eberhardt & Mayberry, 1995; Gardner, 1994; Maluccio, 1979). In addition, the literature reports that didactic coursework in family-centered care, role-playing, and simulation activities are factors that influence attitudes. It consistently cites direct contact with families through field experience and educational experiences as the most salient factor. Therefore, one question in the Professional Characteristics Questionnaire asked respondents to choose from a set of educational levels delineated by the presence or absence of family-centered experiences in the degree program(s) attended, both at the undergraduate and graduate levels. A second question required respondents to indicate the nature of their family-centered care educational experiences that included didactic coursework, fieldwork, and guest lecturers (e.g., Pernice & Lys, 1996; Rizzo & Vispoel, 1992).
The literature also cites continuing education in family-centered care as a favorable influence on attitudes (Geissinger et al., 1993); therefore an additional question asked participants to indicate the number of continuing education courses in family-centered care they had taken.

Organizational Culture

The third independent variable in this study was organizational culture. The literature suggests that respondents who work in an organizational culture that is family-friendly will display more family-centered attitudes than those who do not (Gessinger et al., 1993; Humphry et al., 1992; Letourneau & Elliot, 1996). This variable was measured by the Family-Centered Program Rating Scale. The Family-Centered Program Rating Scale (FamPRS) developed by the Beach Center on Families and Disability (1991) examines parents’ and professionals’ perceptions of the “family-centeredness” of their particular program and their feeling about family-centered therapy (see Appendix C).

Two separate scales were developed for staff and for parents. This study used the professional scale, a 59 item instrument designed primarily for program evaluation. Participants respond to a series of statements concerning how well their program is doing in providing various services using a four point scale ranging from poorly (1) to excellent (4).

The FamPRS was field tested with respondents from 10 states. A factor analysis was conducted on test items with 11 factors finally identified. In this study, the impact of each factor on professionals’ attitudes was considered. Internal consistency coefficients (Cronbach’s alpha) for the professional scale ranged from .63 -.87, with a mean of .73 (Murphy & Lee, 1991, p. 7).
Procedures

Two hundred and fifty subjects were sent packets that included the three instruments, a cover letter explaining the nature of the study, a stamped return envelope, a two dollar bill, and (see Appendix D for the cover letter). The two dollar bill was provided as an incentive for participants to complete the surveys. The subjects were given 2 weeks to respond. A total of 124 packets were returned for a 50% return rate, although some participants did not complete all survey questions. Upon return of the packets, data from the instruments were entered into an SPSS data file.

Data Analysis

For research question #1, which identified attitudes of pediatric occupational therapists, descriptive statistics were computed from responses on the Professional Attitude Scale. For research question #2, which looked at the relationship between attitudes of therapists and the independent variables, correlation coefficients were calculated to determine the relationships between the scores on the Professional Attitude Scale and each of the independent variables (the scores on the Family-Centered Program Rating Scale and the professional characteristics independent variables). The nature of the independent variable determined the procedure used in each case. When the independent variable was on an interval or ratio scale, Pearson’s Product Moment Correlation was used. For independent variables on ordinal scales, Spearman’s Rho was the statistic that was calculated. For nominal, dichotomous independent variables, the Point Biserial correlation was calculated. For research question #3, which attempted to identify which group of independent variables is the best predicator of attitudes; a multiple linear regression analysis was conducted using the scores on the Family-
Centered Program Rating Scale and the professional characteristics independent variables as predictor variables and the score on the Professional Attitude Scale as the criterion variable.

Summary

This chapter described the research methods that were used in the study. A sample of 250 occupational therapists was randomly selected from the population of members of the American Occupational Therapy Association who were involved in pediatric therapy. They were mailed a package of three instruments designed to assess their attitudes towards family-centered care, the level of family-centeredness of their current workplaces, and a group of professional characteristics.

Descriptive statistics were calculated in order to describe participants’ attitudes toward family-centered care. Correlation coefficients were calculated between the participants’ attitudes toward family-centered care and a group of variables measured by the instrument that probed family-centeredness of their workplaces and responses to the professional characteristics survey. Finally, in order to determine a set of variables that could predict participants’ attitudes toward family centered care, a linear multiple regression was conducted using the attitude measure as the criterion variable and the family-centeredness of the workplace measure and the professional characteristics as the predictor variables.
CHAPTER IV

RESULTS

The purpose of this study was to explore the relationship of selected attributes (professional characteristics, education, and organizational culture) to attitudes occupational therapists hold toward family-centered practice. This chapter will present the characteristics of the sample used in the study and the findings related to the three research questions.

Characteristics of the Sample

Descriptive statistics for each of the variables in the Professional Characteristics Questionnaire were calculated for several reasons. First, the literature indicates that these variables are related to attitudes toward family-centered practice as noted in Chapters 2 and 3. Second, the second and third research questions deal with correlations between these variables (among others) and the measure of attitude toward family-centered practice. It was important to assess the variability of these variables since correlation statistics are sensitive to the restriction of range phenomenon. Finally, descriptions of the characteristics of samples are important for future researchers who wish to compare their samples to those used in this study in order to allow comparisons between their studies and this one.

Personal Characteristics

The mean age of the participants was $M = 42$ years $(SD = 10.2)$ with a range of 23 to 66 years. The mean number of years working in early intervention was $M = 6$ $(SD = 6.4)$ with a range of less than 1 year to 30 years. The mean number of years working with children aged 3 to 21 years was $M = 12.5$ $(SD = 8.5)$ with a range of less than 1 year
to 40 years. These variables have acceptable levels of variability for use in correlational procedures.

**General Professional and Educational Characteristics**

Participants were asked to indicate whether their present positions were as staff or as supervisors in the institution where they worked. The majority of respondents (79%) reported they held staff positions, while 21% of the respondents reported they held supervisory positions.

The participants were asked to choose their highest level of training in occupational therapy from among five choices. Table 1 summarizes their responses. Note that the professional master's degree is a first professional degree and is taken by students who do not hold bachelor's degrees in occupational therapy. It is an entry level degree. Also note that none of the respondents held doctoral degrees.

**Table 1**

*Level of Education of Occupational Therapists (n=123)*

<table>
<thead>
<tr>
<th>Degree</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor's</td>
<td>68</td>
<td>55.3</td>
</tr>
<tr>
<td>Professional master's without family-centered care experience</td>
<td>24</td>
<td>19.5</td>
</tr>
<tr>
<td>Professional master's with family-centered care experience</td>
<td>9</td>
<td>7.3</td>
</tr>
<tr>
<td>Advanced master's in occupational therapy or master's in related field with family-centered care experience</td>
<td>22</td>
<td>17.9</td>
</tr>
<tr>
<td>Doctorate</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Specific Occupational Therapy Training Experiences

Level 1 fieldwork experiences are typically 1 week long during the course of a semester. Therefore, a student will have completed 4 weeks of Level 1 fieldwork in the 2-year preservice training. Sixty percent of the respondents reported they worked with families during their Level 1 fieldwork, while 40% reported they did not. Level 2 fieldwork experiences are 24 weeks in duration and typically done at the end of didactic coursework. The majority of respondents (65.3%) indicated they did not work with families during their Level 2 fieldwork.

Concerning didactic course work in family-centered care, it was found that 57% of respondents reported they did not have any coursework in family-centered care during their occupational therapy education. Respondents also reported on the number of continuing education courses taken in family-centered care (Table 2). All respondents reported taking continuing education courses in family-centered care. In fact, about a third of them reported taking seven or more courses in family-centered care.

Table 2

<table>
<thead>
<tr>
<th>Number of courses taken</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 3 courses</td>
<td>47</td>
<td>38.5</td>
</tr>
<tr>
<td>4 to 6 courses</td>
<td>31</td>
<td>25.4</td>
</tr>
<tr>
<td>7 to 10 courses</td>
<td>16</td>
<td>13.1</td>
</tr>
<tr>
<td>More than 10 courses</td>
<td>28</td>
<td>23.0</td>
</tr>
</tbody>
</table>
Findings Concerning the Research Questions

In order to respond to the three research questions, the responses of the respondents on all three of the instruments were analyzed using a series of descriptive and inferential statistics.

Research Question 1

What are the attitudes of pediatric occupational therapists working in different practice settings toward family-centered care?

The mean score of the Professional Attitude Scale based on all respondents was $M = 2.93$ ($SD = .178$). Using a 4-point scale, this score reflected overall positive, favorable attitudes towards family-centered care. *T*-tests were conducted between the scores of the respondents working in early intervention and the respondents working with children 3 years of age and over. For respondents working in early intervention $M = 2.94$ ($SD = .185$). For respondents working with children 3 years and older $M = 2.90$ ($SD = .161$). The difference in mean attitude scores between occupational therapists working in early intervention settings and those who worked with children 3 years of age and over was not significant ($t = -1.27$, $df = 121$, $p = .208$).

Research Question 2

Which of the selected therapist attributes (professional characteristics, education, and organizational culture) are related to attitudes toward family centered care?

Appropriate correlation coefficients were calculated for the relation of attributes (professional characteristics, education and organizational culture) to the dependent variable (mean attitude score). None of the correlations for educational and professional
variables were significant (see Table 3). A moderate correlation was found between organizational culture and attitude toward family-centered practice.

Table 3

**Correlations of Independent Variables and Therapists' Attitudes Towards Family Centered Care (n=120)**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Correlation with Attitude Toward Family Centered Care</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years Experience in Early Intervention</td>
<td>.070&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.221</td>
</tr>
<tr>
<td>Years Experience working with Children 3-21</td>
<td>-.019&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.418</td>
</tr>
<tr>
<td>Primary Professional Position</td>
<td>.025&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.391</td>
</tr>
<tr>
<td>Highest Level of Education</td>
<td>.086&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.172</td>
</tr>
<tr>
<td>Didactic Coursework in FCC</td>
<td>.078&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.198</td>
</tr>
<tr>
<td>Exposure in Level 1 Fieldwork</td>
<td>.023&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.401</td>
</tr>
<tr>
<td>Exposure in Level 2 Fieldwork</td>
<td>.034&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.354</td>
</tr>
<tr>
<td>Exposure to Families as Role Models</td>
<td>.009&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.459</td>
</tr>
<tr>
<td>Number of FCC Continuing Education Courses</td>
<td>.048&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.300</td>
</tr>
<tr>
<td>Family Centered Program Rating Scale</td>
<td>.368&lt;sup&gt;a&lt;/sup&gt;</td>
<td>&lt;.001&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Pearson's product-moment correlation  
<sup>b</sup> Point biserial correlation  
<sup>c</sup> Spearman's Rho correlation  
<sup>*</sup> p<.05

Since only the score of the Family-Centered Program Rating Scale appeared to be related to clinicians' attitudes toward family-centered therapy, this variable was examined further. A factor analysis of the organizational culture instrument (the FamPRS) was performed. Although, as noted in Chapter 3, the field test of the
instrument by Murphy and Lee (1991) yielded 11 factors, the authors had used responses obtained from a group of early intervention professionals, only some of whom were occupational therapists. This brought the applicability of their factor structure into question in this study where the population of interest consists solely of pediatric occupational therapists. Further, all pediatric occupational therapists are not necessarily early intervention practitioners. In fact, as noted earlier in this chapter, a number of the clinicians in this sample worked with clients aged up to 21 years. So, in order to obtain some idea of the underlying structure of the FamPRS when applied to this population of occupational therapists a factor analysis using data from this sample was carried out.

Two factors, empowerment and responsiveness, were extracted using a principal components extraction and varimax rotation, in addition to examination of the scree plot. These two factors accounted for 50% of the total variance of the scores on the instrument. The first factor accounted for 45.6% of the variance and the second for 4.3% of the variance. A reliability analysis was conducted and four items on the FamPRS were found to have low correlations with the total score. These four were deleted from the original 59 items. The items deleted were (a) “staff members help families feel they can make a positive difference in their children’s lives”, (b) “staff give families time to ask about their experiences and things that are important to them”, (c) “staff give families clear and complete information”, and (d) “staff tell families what they have learned right after their children’s evaluation”. See Appendix E for the factor loadings.

Coefficient alphas were computed to obtain internal consistency estimates of reliability for the total instrument and for each of the two factors. The coefficient alpha
for the FamPRS (with 4 items deleted) was .97. The alphas for Factors 1 and 2 were .92 and .95 respectively.

Factor 1: Empowerment. Factor 1, consisted of a group of 30 items and accounted for 45.6% of the variance of the scores on the FamPRS. This factor dealt with empowering families to be advocates for their children. All of the items related to staff recognizing and acknowledging the strengths families bring to the table and providing them with knowledge and resources so they can continue to advocate and be knowledgeable decision makers for their children. It included items such as: (a) staff help families plan for the future; (b) staff gives families information about how children grow and develop; (c) treat families as true experts on their children; and (d) respect differences among children, families.

Factor 2: Responsiveness. Factor 2, included 25 items and accounted for 4.3% of the variance. This factor was concerned with flexibility and responsiveness to family identified needs. All of the items reflect the accommodations staff makes to meet the needs of families and their awareness of the uniqueness of each family. Some of these items were: (a) services are planned with families’ transportation and scheduling needs in mind; (b) the program offers information in a variety of ways; (c) staff offers to visit families in their homes. Table 4 shows five defining items (i.e., items that load highest) for each factor and their loadings.
Table 4

Loadings of the Five Definitive Items in Each of the FamPRS Factors

<table>
<thead>
<tr>
<th>Item</th>
<th>Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Empowerment</td>
</tr>
<tr>
<td>Staff members don’t ask about person matters unless necessary</td>
<td>.758</td>
</tr>
<tr>
<td>Staff members don’t act rushed when meeting with families</td>
<td>.705</td>
</tr>
<tr>
<td>Staff members give family clear and complete explanations about their children</td>
<td>.698</td>
</tr>
<tr>
<td>Staff members respect the involvement level the family chooses</td>
<td>.698</td>
</tr>
<tr>
<td>Staff members help families feel more confident about working with professionals</td>
<td>.679</td>
</tr>
<tr>
<td>The program gives other children in families support and information about their brother’s or sister’s disability</td>
<td>.086</td>
</tr>
<tr>
<td>The program helps families with information about jobs, counseling, housing, and other basic needs</td>
<td>.093</td>
</tr>
<tr>
<td>Staff members offer to visit families in their homes</td>
<td>.180</td>
</tr>
<tr>
<td>In this program a staff member helps the family communicate with other members of the staff</td>
<td>.331</td>
</tr>
<tr>
<td>The program gives them information on how to meet other families of children with similar needs</td>
<td>.200</td>
</tr>
</tbody>
</table>

Pearson Product moment correlations were conducted between each of the two factors and the mean attitude score. Both factors demonstrated moderate correlations. The empowering families to be advocates for their children factor had a correlation of $r = .31$ with the attitude score ($p<.01$). The flexibility and responsiveness to family identified needs had a correlation of $r = .26$ ($p<.01$) with the attitude score. Using factor analysis, which identifies the underlying constructs of the organizational culture variable, more specifically defines the idea of organizational culture. It allows greater specificity in conceptualizing the variable and, therefore, clarifies areas or domains that might be
amenable to interventions. The fact that both these underlying concepts show positive relationships indicate that both factors are predictors of the attitude scores and this could provide useful directions to program developers involved in family-centered care instruction.

**Research Question 3**

Which of the selected therapist attributes is/are the best predictor(s) of favorable attitudes toward family-centered care?

Stepwise regression analysis was conducted (see Table 5) to determine which attributes would be the best predictor of attitudes toward family-centered care. As stated previously, there were no significant correlations between the educational and professional attributes and the mean attitude score. However, the two factor scores on the Family-Centered Program Rating Scale (organizational culture instrument) accounted for 16% of the variance ($R^2 = .16$). This indicates that the family centeredness of the

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE$</th>
<th>$B$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empowerment</td>
<td>.056</td>
<td>.017</td>
<td>.313</td>
</tr>
<tr>
<td>Responsiveness</td>
<td>.056</td>
<td>.016</td>
<td>.313</td>
</tr>
<tr>
<td>Empowerment</td>
<td>.046</td>
<td>.016</td>
<td>.260</td>
</tr>
</tbody>
</table>

Note: $R^2 = .09$ for Step 1; $\Delta R^2 = .07$ for Step 2 $p < .05$
organization in which clinicians work, as measured by the FamPRS, is a weak predictor of their attitudes towards family-centered care.

Summary

This study examined the relationships of selected attributes (professional characteristics, education, and organizational culture) to attitudes occupational therapists hold toward family-centered practice. Overall, attitudes of occupational therapists working in different practice settings were favorable. This is indicated by the fact that the mean score of the attitude scale (the Professional Attitude Scale) was calculated to be $M = 2.93$ out of $4.00$ ($SD = .178$). There was no significant difference in the mean attitude scores of respondents working in early intervention and respondents working with children 3 years of age and over ($t = 1.27$, $df = 121$, $p = .208$).

Correlation studies were conducted between these attributes and the mean attitude score. None of the education or professional attributes demonstrated any significant correlations with the attitude score. A significant correlation was found between the mean score on the organizational culture instrument (Family Centered Program Rating Scale or FamPRS) and the mean score of the attitude instrument ($r = .368$, $p < .05$). A factor analysis was conducted on this organizational culture instrument in order to determine its underlying structure when it is used with the population of interest in this study. Two factors were extracted using a principal components extraction and varimax rotation. Factor 1 was called empowerment. Factor 2 was named responsiveness. Both of these factors were positively related to clinicians’ attitudes toward family-centered practice.
A regression analysis was conducted to determine which attributes would be the best predictors of variables toward family-centered care. The two factor scores on the FamPRS accounted for a total of 16% of the variance.

In conclusion, this study found that there was no relationship between clinicians' attitudes toward family-centered care and their educational and professional characteristics and a moderate relationship between their attitudes and the family centeredness of their workplaces. It was found that the two factors (empowerment and responsiveness) underlying family centeredness were only weak predictors of clinicians' attitudes toward family-centered practice.
CHAPTER V
DISCUSSION

The purpose of this research study was to explore the attitudes that occupational therapists hold toward family-centered care. In this chapter research findings are discussed in light of the current literature on family-centered care. Additionally, recommendations for practice along with suggestions for future research in this area are included as they relate to this study's findings.

Research Findings

This section discusses conclusions reached concerning data collected and analyzed in order to answer this study's three research questions on occupational therapists' attitudes toward family-centered care. Findings are also discussed as they relate to the relevant literature in the field.

Research Question 1

What are the attitudes of pediatric occupational therapists working in different practice settings toward family-centered care?

Based on the occupational therapists responses on the Professional Attitude Scale, the results of this study demonstrated that they held favorable attitudes toward family-centered care. This finding is consistent with the literature, which reports that pediatric health professionals working with children in hospitals and early intervention settings demonstrate positive attitudes and/or perceptions toward family-centered care tenets (Bailey et al., 1992; King et al., 1998, 2003; Roush et al., 1991).

It is interesting to note that in this study no significant difference between practitioners working in early intervention and those in school settings were found,
whereas in other studies attitudes of nurses differed by setting (for example, Bruce et al., 2002). This present research finding may be attributed to the work experiences of the occupational therapists in this study. Many of the therapists in this study who were working with older children had also worked in early intervention settings, and had therefore, worked in a family-centered culture, even if they were not doing so at the time of the study. Specifically, 82% of the respondents reported they had worked both early intervention and in school settings. In addition, this demonstrates the impact of culture in another way. In the educational culture, health professionals such as Occupational Therapists work in early intervention and school-based settings that are all under the IDEA mandates; whereas in hospitals nurses treat children of all ages in a medical model dominated environment. Clinicians working in both cultures continue to report a gap between best practice and the reality of daily clinical practice (King et al., 1998, Lawlor & Mattingly, 1998).

Discrepancies between attitude and practice. While previous study findings concerning health professionals are consistent with the present study’s finding of favorable attitudes toward family-centered care, the literature also reports a discrepancy between clinicians’ views of family-centered care and the family-centered care behaviors they report using. This gap has been attributed to system and professional barriers that impact clinicians’ attitudes toward family-centered care and their subsequent family-centered care behaviors (King et al., 1998, Lawlor & Mattingly, 1998). Therapists practice under bureaucratic constraints that might limit their ability to be flexible and meet the individual needs of families. For example, a working parent might want to schedule a meeting with a therapist in the evening, but the facility may not provide
flexible employee work hours to accommodate these meetings. In addition, many parents need childcare for other children in order to be involved in their child's therapy program, but the facility may not provide childcare for siblings.

Recent findings continue to show that practitioners are anxious to use family-centered therapies and that these strategies tend to be particularly efficacious (King et al., 2003; Klein & Gilkerson, 2000). This places an onus on organizations to offer institutional support that is designed to both increase the ability of practitioners to provide family-centered therapy and to facilitate family participation in the process. For family-centered care to be successful there has to be organizational support at all levels. As evidenced by the hospital studies of Capitulo & Silverberg (2001), when organizational support is provided, family-centered care intervention can be successfully implemented.

However, this study focused on family-centered care in the educational arena. The setting in which services are provided is an integral part of organizational culture. Part C of the Individual for Disabilities Education Act (IDEA), which mandates family-centered care for the birth through age two population, states that services are to be provided in the child's "natural environment." Part C settings vary tremendously, depending on the resources and logistics of implementation. Some children receive services in their home, others in center-based settings (early intervention schools or hospitals), or in private practice settings. Research in educational based family-centered care has recognized the barriers that impede family-centered care practice; the complexity of the various settings where early intervention services may be housed compounds these barriers (Bailey et al., 1992; Campbell & Halbert, 2002). This is because early intervention practitioners who
may often work simultaneously in several settings may be expected to work under different organizational systems in each setting.

Socialization. Professionals are socialized through the organizational culture of their institution. This process occurs thorough hearing organizational stories, and through participating in the organizations traditions, policies, and educational opportunities.

Concerning professional barriers, practitioners have reported that they need additional training in family-centered care practice so they can competently engage in it (Gill, 1993, 1997; Godfrey, 2000). This lack reflects the fact that studies across disciplines cite limited coursework and field experience in family-centered care (Bailey, et al., 1990; Hanson & Lovett, 1992). Indicative of this situation, in this study the majority of respondents reported they did not have family-centered care coursework or fieldwork experience in their entry level degree program.

This situation has developed because traditionally, therapists have been socialized in a medical model, which is child-centered and places the clinician in charge. In contrast, family-centered care demands partnerships between families and professionals and looks at the needs of the entire family, not just the child. Family-centered care also calls for clinicians to take on other roles besides that direct service provider. Appropriate roles may include coordinating services for families, providing psychosocial intervention for families, and advocating for families. Higher education faculty have recently started to incorporate family-centered care philosophy and coursework into their curricula. As yet, there is little evidence that faculty have adopted strategies that will encourage present practitioners to embrace a philosophical shift from child-centered care to family-centered care intervention. Therefore, because of this limitation students enrolled in preservice
programs are often lacking any professional socialization experiences in family-centered care.

This philosophical shift can occur through the process of socialization. Theorists report that socialization occurs in different contexts and is an active process for the learner (Howkins & Ewens, 1999; Lurie, 1981). Professional socialization (formal socialization) experiences at the preservice level are the building blocks for future socialization. Professional socialization provides the basis for role content. This content includes skills and behaviors; but also attitudes, values, and mores expected of the professional. Post socialization experiences are more powerful than formal educational experience occurring at the preservice level, since they are part of the clinician’s employment experience (Howkins & Ewens, 1999). In many areas of the helping professions the lack of experience with family-centered care philosophy has made socialization of caregivers into this strategy problematic. In fact, family-centered care philosophy has only recently been addressed in the occupational therapy curricula; making professional socialization in family-centered care a relatively new phenomenon. What has spread this philosophy among early intervention professionals is that since 1986 practitioners in early-intervention centers have been forced to reexamine their philosophy in order to comply with the mandates of the Individual Disabilities Education Act. Thus, post socialization experiences in family-centered care may be the initial exposure to this philosophy by occupational therapists as opposed to nurses and social workers who have family-centered care philosophies introduced in their formal socialization at the preservice level. For example, in this study the majority of
respondents reported they did not have family-centered care coursework or fieldwork experience in their entry level degree program.

The power of the socialization experience at work has been illustrated in recent studies looking at family-centered care attitudes and behaviors in hospital emergency rooms. These studies have found that practitioners working in hospitals with a family-centered care culture have demonstrated more favorable attitudes toward family-centered care and have reported using more family-centered practices than have practitioners working in hospitals where other philosophies prevailed (Bruce et al., 2002; Eckle & MacLean, 2001; Hemmelgarn et al., 2001). Physicians in hospitals that were not family-centered held negative attitudes toward family-centered care. For example, one physician stated “the mission of the ER was saving lives, not providing mental health services” (Hemmelgarn et al., p. 100). This statement negates family-centered care tenets that support psychosocial intervention with families in order to empower them to care for their children. Not unexpectedly, researchers have concluded that when the organizational culture emphasizes and supports family-centered care policies, clinicians are more likely to embrace these attitudes and behaviors. In this study, the majority of respondents reported they had attended one or more continuing education courses in family-centered care.

Another study, assessing family-centered care policies and practices for pediatric patients in emergency rooms found that family participation in the child’s care was encouraged in those setting where the department culture was one of inclusion and support, and where the hospital had education programs and work competencies
geared to family-centered care (Eckle & MacLean, 2001). Providing appropriate educational experiences for staff enhances their personal competencies to work with families and thus increases the likelihood of their engaging in these behaviors. This process can be understood in the context of attitude formation theory, which suggests that direct and relevant experience (such as analyzing case studies of multicultural families) with an attitude object (e.g. collaborating with families from diverse backgrounds) will strengthen attitudes toward working with these families.

The theory of planned behavior also helps explain these observations. Providing clinicians with education in family-centered care is an antecedent to the development of behavioral beliefs about their attitudes toward family-centered care. Clinicians working in a family-centered care culture with established organizational policies and training will be supported by others as far as engaging in these behaviors (subjective norm component). As a result of the meaningful and relevant educational experiences in the ensuing training, the clinicians will have higher perceived behavior control. Acting on this perception, they may well engage in family-centered care. This is because they will feel more confident that they can successfully exhibit family-centered behavior. Therefore, it can be said that having these components in place fosters the development of family-centered care attitudes and behaviors. The education and organizational culture components were also found to contribute to favorable attitudes toward family-centered care in the literature (along with professional characteristics); and were therefore examined in the next research question.
Research Question 2

Which of the selected therapist attributes (professional characteristics, education, and organizational culture) are related to attitudes toward family-centered care?

In the current study, only organizational culture was found to be related to practitioners' attitudes toward family-centered care. This can be explained by acknowledging the central influence of the work environment on socialization of professionals. This finding is supported by recent studies, which found organizational culture to be the most important attribute impacting family-centered care attitudes and behaviors (Bruce et al., 2002; Eckle & Maclean, 2001; Hemmelgarn et al., 2001; King et al., 1998). As with this study of occupational therapists, Bruce and colleagues found that nurses' practices and perceptions of family-centered care did not differ by years of experience, position, or age (Bruce et al., 2002). However, they did find that nurses who worked in hospitals with a family-centered care culture demonstrated more family-centered care practices. Additionally, researchers reported that nurses working within a family-centered care culture attended specific family-centered continuing education classes in their workplaces. The relevance and education component of attitude formation theory support these findings. Training at the workplace is typically relevant to work expectations and more powerful than preservice training experiences (Howkins & Ewens, 1999).

A number of studies dealing with family-centered care have been done using nurses working at hospitals as subjects. This is very likely because hospital based nurses are easier to observe than many other health care professionals (such as occupational therapists) because their practice is confined to a small area (the hospital) and there may
be many nurses in the same location. This provides researchers with easier access to research subjects than they would have in the case of occupational therapists, as the latter work in a variety of different home or school based, clinical, or private practice settings.

In their study of emergency room staff perceptions of family-centered care, Hemmelgarn et al. (2001) reported that professional characteristics were not significantly related to attitudes concerning family-centered practice. However, variables such as family-centered organizational culture and climate were positively related to favorable family-centered attitudes held by emergency room staff (Hemmelgarn et al.). Studies of family-centered care in emergency rooms have confirmed the importance of hospital based inservice training (Eckle & Maclean, 2001; Hemmelgarn et al., 2001). These studies point to the importance of both organization culture and the context of education in determining attitudes toward family-centered care. Attitude formation theory is a useful framework to use in order to understand why these educational experiences may positively impact attitudes. Workshops on family-centered care that are conducted in hospitals typically use case studies, incident reports, and narrative stories of families; these are relevant and direct experiences that are meaningful to the employees.

Educational attributes. This study did not find any significant relationships between participants’ attitudes towards family-centered care practice and any of their educational characteristics reported in the demographic survey. In contrast to this, Humphry and Geissinger’s (1992) study found that participation in a continuing education workshop favorably influenced occupational therapists’ attitudes toward family-centered care. However, there was no control group in this study, so other factors may have influenced attitudes. Interestingly, those clinicians working in early-
intervention centers demonstrated the most favorable attitudes as did clinicians from states that were very progressive in implementing Part C of the IDEA. This points to the importance again of organizational culture, as these occupational therapists may have been strongly influenced by the family-centered care tenets of their work culture. This variable was not considered by Gesssinger et al. at that time. Nurses have been at the forefront of efforts to facilitate the change to a family-centered culture in the pediatric hospital environment. The importance of organizational culture on family-centered care has just recently been recognized in the nursing literature. It is very interesting that the findings of this study appear to be similar to the recent findings reported in the nursing literature because research on family-centered care and organizational culture in the educational setting has been quite limited due to the complexity of the different systems and logistical priorities of stakeholders.

One such study by King et al. (2003) did examine the perceptions and practices of family-centered care among 324 service providers (24% occupational therapists), working in pediatric rehabilitation settings in Ontario. Sixty-one percent of service providers reported having had training or education in family-centered care. However, the study did not describe the context of this training. It would have been useful to identify where training experiences occurred to determine if this training was in the context of organizational culture experiences or preservice experiences. The literature suggests that work socialization is powerful and directly related to organizational culture. King et al. found that 7% of the variance in service providers’ beliefs toward family-centered care was accounted for by training in such care, respondents’ discipline, and years of experience. In addition, their study found that 7% of the variance toward
perceived self-efficacy regarding family-centered care behaviors was related to the training received in family-centered care.

The theory of planned behavior can shed some light on those findings. Clinicians provided with meaningful educational experiences (antecedent to development of their attitudes and perceived behavioral control) will be more likely to engage in family-centered behaviors. However, that study did not examine the impact of organizational culture on attitudes and behaviors toward family-centered care. Doing so might have increased the very small variance of the results. Added information concerning the context of the training would have provided educators with input as to where best to focus future training in family-centered care (e.g. workplace or preservice).

Indeed, while there may be some reason to suspect that while education may play a part in influencing various service providers' attitudes toward family-centered practice, educational experiences of occupational therapists may not have much effect. Studies by King et al (2003) and by Letorneau and Elliot (1996) have shown that for social workers and nurses there is a relationship between their educational experiences and their attitudes towards family-centered care while for physicians and for physical and speech therapists there is little or no relationship between these two variables. Researchers suggest that these findings may reflect the preservice education and socialization processes of these different professionals. Social workers in particular, and nurses holding graduate level degrees, are trained to work with families on psychosocial issues. In contrast, the literature documents that psychosocial issues and family-centered care have not traditionally been a part of physicians' medical school curriculum and/or the curricula of physical and speech therapists. (Doherty, 1995; Yeheskil, Biderman, Borkan & Herman,
2000). The results of this study are consistent with these earlier findings as the majority of current respondents indicated they did not have didactic coursework in family-centered care in their preservice education.

*An historical explanation.* When considering this current study, findings may be further explained by examining the historical context of family-centered care practice. This current study did not find any correlation between respondents’ professional and educational attributes and their attitudes toward family-centered care. The earlier studies that report such relationships were conducted at the beginning of the family-centered care in educational and medical settings. When these studies were being conducted, university departments training these practitioners would have been engaged in teaching the elements of family-centered care while practitioners working at that time would not have been exposed to a family-centered care culture. Therefore, at that time, educational experiences might have had more influence on practitioners. Later studies were conducted at a time when there was already a positive attitude toward family-centered care at institutions providing clinical care and it is likely that the stronger effect of socialization at these institutions might mask the effects of preservice education.

**Research Question 3**

*Which of the selected therapist attributes is/are the best predictor(s) of favorable attitudes toward family-centered care?*

In this study, 16% of the variance of the mean scores of the attitude toward family-centered care was explained by the respondent’s organizational culture. No other variables predicted favorable attitudes toward family-centered care. However, this
finding did little to shed light on the characteristics of the organizational culture that might be considered important in determining attitude toward family-centered care.

This lack of clarity may be due, at least in part, to information provided by the Family-centered Program Rating Scale itself. The FamPRS is divided into 11 subscales based on a factor analysis done by the authors. However, it was not clear from the test manual that the underlying structure of the instrument would be consistent across various types of clinical situations. Whether or not the factor structure obtained by the authors of the test would hold for the situations where occupational therapists worked was an important question to consider since it would give an indication of how the 16% of the variance of attitude mean scores accounted for by organization culture was distributed.

To answer these questions, factor analysis was conducted on the organizational culture instrument using the responses of the subjects in the sample obtained for this study. Two factors were extracted using a principal components extraction and varimax rotation. These two factors accounted for 50% of the total variance of the scores on the instrument. Factor 1, which accounted for 45.6% of the variance concerned empowering families to be advocates for their children. Factor 2, which accounted for 4.3% of the variance concerned flexibility and responsiveness to family identified needs. These factors relate directly to the tenets of family-centered care that organizations must cultivate in employees. When looking at the original instrument's factor analysis (Murphy & Lee, 1991), the factor that came out as most significant was the "flexibility, and responsiveness to family identified needs." While it is true that this factor accounted for a small proportion of the total variance in both studies, its presence is noteworthy since it shows some consistency across professional groups.
Further, this notion of flexibility and responsiveness harkens back to the earlier discussion of the discrepancy between attitudes and practices. That is, it indicates the necessity of establishing institutional policies that are consistent with the needs of family-centered practice. Respondents perceive the family-centeredness of the institutions in which they work, at least partly as a function of their institution’s ability to respond to families’ needs.

However, the greatest portion of the variance of the practice instrument was accounted for by the “empowerment” factor. This suggests the importance of allowing and encouraging families to act as valued participants in decisions concerning their children’s treatment. In order to accomplish this, schools and hospitals that have established policies employ parents as teachers and advocates. These parents share their experiences in the institutions to promote understanding and change.

Attitude formation theory is helpful to explain the success of these experiences. It explains the importance of direct and relevant experience in changing attitudes. Additionally, the theory of planned behavior is also relevant. Empowered parents may have increased their perceived behavioral control to collaborate and take charge in the care of their child with special needs. They are also supported by the institution (subjective norm) that values their assistance in enhancing the training experiences of their health professionals. Returning to this study, empowering families to be leaders in the process where they can serve as equal partner role models to clinicians appears to foster clinicians’ positive attitudes toward these families. This has been substantiated in the literature, which reported that experience with families in equal context roles facilitates positive attitudes toward these families (Winton, 1990, 1996).
Summary of the Findings

This investigation found that occupational therapists currently working in the field have positive attitudes toward family-centered care. No differences in attitudes were found between groups of occupational therapists who worked with very young children in early intervention programs and those who worked with children in schools. Out of a set of independent variables including such things as level of training, age, time in service as a therapist working in early intervention, time working with school aged children, and practitioners' perceptions of the family-centeredness of the organizational culture of the organization in which they presently worked, only the family-centeredness of the organization was significantly related to therapists' attitudes towards family-centered care. This variable accounted for only 16% of the variance in the measure of attitude.

Further analysis of the measure of organizational culture found that, in this sample, it was composed of two underlying factors: The first, accounting for a large measure of the total variance, was labeled "empowerment" and concerned empowering families to be advocates for their children. The second, accounting for a much smaller proportion of the variance, was labeled "responsiveness" and concerned flexibility, and responsiveness to family identified needs.

These overall findings are supported by recent studies in nursing which cited organizational culture as a determining factor of family-centered care practice in the emergency room (e.g., Hemmelgarn et al., 2001). The results of their study suggest that staff who work in hospitals where the organizational culture supports and facilitates family-centered care tenets, demonstrate and articulate more family-centered care
attitudes and behavior. Hemmelgarn et al. did not find any relationships between professional group, (nurse, physician, and social worker) years of experience and their reported family-centered behaviors. The authors concluded, “We believe the extent to which health care providers emphasize and practice family-centered care is more a function of the culture of the organization in which they work than of their individual training and experience” (Hemmelgarn et al., p. 95). Their study also emphasized the importance of providing staff with the support they need; for example peer and pastoral counseling and bereavement visit time. Reflecting this point Bruce and his colleagues suggested an additional tenet of family-centered care which states that such care includes the “implementation of appropriate policies and programs that are comprehensive and provide emotional support to meet the needs of staff members” [emphasis in the original] (Bruce et al., 2002, p. 411).

Recommendations

In this section recommendations for practice will be made in light of this study’s research findings. As occupational therapy educators and researchers are continually looking at curriculum development, recommendations for practice at the preservice level are discussed first, followed by recommendations for occupational therapists in the work setting. Finally, recommendations for future research will be discussed.

Recommendations for Practice

1. Parental empowerment was found to correlate positively with attitudes toward family-centered care and fieldwork with families provides an opportunity for occupational therapist students to become familiar with the role of parents in the care of their children with special needs. Therefore, fieldwork experiences with
families should be a mandatory component of the fieldwork experience in the occupational therapy curricula. This has already been implemented in a few medical school programs. For example, students should spend 40 hours with families to experience the day to day reality of living with a child with special needs. They attend focus groups with families, go to medical and school appointments and have seminars with instructors and family teachers. This could easily be one of the level 1 fieldwork experiences students carry out during their preservice training. In addition, occupational therapy programs should offer weekly seminars for students during this fieldwork to assist them to strategize solutions for the theory-practice gap issues they may encounter.

2. To encourage occupational therapy students to facilitate the empowerment of parents, occupational therapy programs should establish ties with parent advocacy groups and ask them to serve as faculty for relevant coursework and on advisory boards to the college. For example, there are parent advocacy groups that have developed grants with universities to serve as “families as faculty” in medical schools and allied health programs.

3. Since organizational culture is positively related to family-centered care attitudes of practitioners, advanced training in occupational therapy (advanced masters and doctoral programs) should include a specialty track in organizational development with field experience at successful centers. The intent of this training is to facilitate leadership development and organizational development skills of graduates to become change agents for family-centered care in the community.
4. As organizational culture was found to be related to attitudes clinicians hold toward family-centered care, occupational therapy directors should work with expert consultants such as those from the Institute for Family-Centered Care to develop a family-centered agenda for specific workplaces.

5. Since empowerment has been found to be related to attitudes of occupational therapists, clinicians in the community should become active in parent advocacy groups to facilitate parent-professional collaboration and understanding. Community-based clinicians should ask families to serve on family advisory boards and patient-satisfaction committee within their settings to facilitate establishment of a family-centered care culture.

**Recommendations for Further Research**

This study’s limitations need to be considered when proposing recommendations for future research. This study only examined the views of occupational therapists who are members of the American Occupational Therapy Association. In addition, responses were obtained through self-report instruments, which may not truly reflect the beliefs of respondents as they might have answered questions in a socially desirable manner. This study did not follow-up with non-respondents, which might have increased the pool of responses received.

1. To further corroborate findings of this study, replicate this study with different cohorts of occupational therapists (recent graduates, mid-career practitioners). In addition, develop a plan to follow-up with non-respondents to enhance return rate. To expand on these findings, also survey family attitudes toward family-centered care and correlate findings with attitudes of professionals.
2. Conduct a study examining all three components (attitude, subjective norm, and perceived behavioral control) of the theory of planned behavior to determine their relative influence on occupational therapists’ intention to engage in family-centered care behaviors.

3. Conduct longitudinal studies to track attitudes and behaviors of students in occupational therapy programs after family-centered care oriented education, immediately after they graduate, and at set times during their careers. As attitudes are influenced by experience; an analysis of data from such studies will trace attitudes as they are affected by various experiences over time. Longitudinal studies may provide valuable insight into factors that influence any changes that are found.

4. Examine various health professional students’ attitudes and behaviors toward family-centered care after participation in interdisciplinary graduate coursework in family-centered care and or continuing education in work setting and compare and contrast findings to clarify training needs for different professions.

5. Conduct a participant observation qualitative study of attitudes of occupational therapists toward family-centered care. This study may glean more comprehensive information as the researcher can witness the behaviors of clinicians and understand it as she is part of the process. For example, the researcher may be part of the team; a practicing therapist in the setting, working on her thesis in family-centered care. This would allow her to experience first hand the logistical and professional barriers that may be indigenous to that
particular setting and explain them as they relate to the socio-historical context of that setting.

6. Using the FamPRS, conduct formative evaluation of programs to identify a baseline level of family-centered culture in the setting. Identify program limitations and implement continuing education strategies to address those limitations. Include parents and professionals the formative evaluation process as both are stakeholders in process and both groups will provide valuable insights and strategies for improvement. Research has demonstrated that this collaboration between parents and professionals strengthens family-centered interventions.

7. Conduct research examining specific organizational culture factors (e.g. heroes, rituals, training experiences) and their influence on recognized situations of successful family-centered care implementation.

This study has added to the research knowledge base concerning attitudes of occupational therapists involved in family-centered care service delivery to children. These study findings illuminate where educators should focus their attention in order to improve training in family-centered care service delivery. Since the context of service delivery continues to change, researchers and clinicians will need to continue to reflect on their attitudes and values in order to continue to provide innovative programming and services for these children and their families.
REFERENCES


APPENDICES
Appendix A

Professional Attitude Scale

It is important to know about your experience with the IFSP/IEP process. Please respond to all questions in this scale. Circle the response that best indicates the way you feel about this process. Thank you!

1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree

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<tr>
<th>Question</th>
<th>SD</th>
<th>D</th>
<th>A</th>
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<tr>
<td>1. Parents who don't recognize their child's needs get in the way during the IFSP/IEP process</td>
<td>1</td>
<td>2</td>
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<td>2. If a child's development is worrisome, then assessments should be done immediately.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>3. I try hard to have people understand what I am trying to say.</td>
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<td>2</td>
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<td>4. I say what I think.</td>
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<td>5. Professionals need &quot;social worker&quot; type skills in the IFSP/IEP process.</td>
<td>1</td>
<td>2</td>
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<td>6. Professionals need to be able to help people solve their problems.</td>
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<td>2</td>
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<td>7. Parents hear negative comments from physicians.</td>
<td>1</td>
<td>2</td>
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<td>8. The first encounter parents have with professional makes them think it's &quot;them&quot; against &quot;us&quot;.</td>
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<td>9. A lack of communication skills hurts the IFSP/IEP process.</td>
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<td>10. Different cultural philosophies about disabilities hinder teamwork during the IFSP/IEP process.</td>
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11. Cultural biases can influence the IFSP/IEP process.  

12. Professionals are too nosy.  

13. It is hard not to judge others.  

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<tr>
<td>14.</td>
<td>For a child who has a disability; professionals expect less than parents do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>15.</td>
<td>The IFSP/IEP process is more difficult than people realize.</td>
<td>1</td>
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<td>16.</td>
<td>I feel guilty that I didn't see the child's problems earlier.</td>
<td>1</td>
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<td>17.</td>
<td>The child's problems are my fault.</td>
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<td>18.</td>
<td>I helped pick the best method to figure out the child's problems.</td>
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<td>19.</td>
<td>Families select what assessments will be done with their child.</td>
<td>1</td>
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<td>20.</td>
<td>I speak my mind during an IFSP/IEP meeting.</td>
<td>1</td>
<td>2</td>
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<td>21.</td>
<td>Professionals tell parents what to do.</td>
<td>1</td>
<td>2</td>
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<td>22.</td>
<td>Families can choose not to answer questions asked of them during the IFSP/IEP process.</td>
<td>1</td>
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<td>23.</td>
<td>Test scores help me understand the child's needs.</td>
<td>1</td>
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<td>24.</td>
<td>Professionals help families to talk about themselves during the IFSP/IEP process.</td>
<td>1</td>
<td>2</td>
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<td>25.</td>
<td>I have control over everything in the IFSP/IEP process.</td>
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<td>26. Parents and professionals should decide together who should be present at the IFSP/IEP meeting.</td>
<td>1</td>
<td>2</td>
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<td>27. Professionals help families say what they are worried about during the IFSP/IEP.</td>
<td>1</td>
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<tr>
<td>28. I wish I understood the IFSP/IEP process better.</td>
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<td>2</td>
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<td>29. As a result of the time it takes to do the IFSP/IEP process, families are getting less direct services.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>30. The more a family understands their child's disability; the easier it is to work with them.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>31. Information and test results should be shared quickly with families.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>32. The family decided who should attend the IFSP/IEP meeting.</td>
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<td>2</td>
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<tr>
<td>33. My concerns were addressed in the assessment process.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>34. Offering hope and encouragement to families is a part of the IFSP/IEP process.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>35. My training in the IFSP/IEP process was adequate.</td>
<td>1</td>
<td>2</td>
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<tr>
<td>36. I must recognize a child's needs to participate in the IFSP/IEP process.</td>
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</tr>
</tbody>
</table>
37. Families should refuse to give information that they prefer not to share.

38. There was enough time for the IFSP/IEP process.

39. The written IFSP/IEP product should reflect the IFSP/IEP process.

40. I judge people during the IFSP/IEP process.

41. I know my role during the IFSP/IEP process.

42. The IFSP/IEP process is never done.

43. If agencies worked together better, doing an IFSP/IEP would be easier.

44. My idea of what is best for the child is different from other team members' ideas.

45. I feel overwhelmed by the IFSP/IEP process.

46. I was upset by things said at the IFSP/IEP meeting.

47. Families feel understood when expressing what they want for their child.

48. Families feel they are expected to share information during the IFSP/IEP.

49. The IFSP/IEP process benefits the child and family.

50. I feel understood when I say what I think is best for the child.

51. I hate being with all the different people for the IFSP/IEP meeting.
52. I felt rushed during the IFSP/IEP meeting(s).  

53. I feel confident that the IFSP/IEP assessment will meet the family's needs.  

54. I try to make certain that the parents' concerns are documented in the written IFSP/IEP.  

55. Parents use the IFSP/IEP document.  

56. Parents' hopes and dreams for the child are included in the IFSP/IEP document.  

57. I use the IFSP/IEP document.  

58. I do not believe I can disagree with the written IFSP/IEP.  

59. I think that the IFSP/IEP document is not written for parents to understand.  

60. There is a lot of unnecessary paperwork in the IFSP/IEP process.  

61. I feel overwhelmed when reading an IFSP/IEP document.
Appendix B

Professional Characteristics Questionnaire

Please answer all questions.

1. What was your age on your last birthday?_________

2. How many years of experience do you have working in early intervention (birth through two)?_________

3. How many years of experience do you have working in pediatrics (children age 3-21)?_________

4. What is your current primary professional position? (check only one)
   Staff_____ Supervisory____

5. What is your highest level of education? (check only one)
   - Doctoral degree with exposure to family-centered care
   - Doctoral degree without exposure to family-centered care
   - Advanced Masters in Occupational Therapy or Masters with family-centered care exposure
   - Professional Masters with undergraduate family-centered care exposure
   - Professional Masters without undergraduate family-centered care exposure
   - Bachelors degree

6. Please check which of the following educational experiences you have had related to family-centered care (you may check more than one):
   - Didactic coursework in family-centered care
   - Fieldwork with families of children with disabilities-Level 1- (experiences designed to enrich didactic coursework through directed observation and participation in selected aspects of the occupational therapy process)
   - Fieldwork with families of children with disabilities-Level 2 (24 week affiliations)
   - Exposure to families as role models during formal education (guest speakers, instructors)

7. How many continuing education courses have you taken in family-centered care or early intervention? (check one)
   - 1-3
   - 4-6
   - 7-9
   - 10 or more

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Appendix C

Family-Centered Program Rating Scale
Provider’s Scale

There are a lot of different ways programs can serve families of young children with special needs. How well do you think this program is doing? The information from this scale will provide us with insight into your organization’s culture toward family-centered care.

Directions: Each statement on this rating scale finishes a sentence which begins with the words at the top of the section. For example, statements in the first section begin with:

In this Program...

All of the statements in the first section finish this sentence. There are three sections; each section has a different beginning. Read each statement and mark it. Please answer all questions!

Tell us how well your program is doing on each item. Circle the letters that most closely tell us your opinion about how your program is doing. P=Poor, OK=Okay, G=Good, E= Excellent.

Start Here

IN THIS PROGRAM...

1. meetings with families are scheduled when and where they are most convenient for them.  
2. the information staff member give families helps them make decisions about their children.
3. someone on the staff can help families get services from other agencies.
4. services can change quickly when families' or children's needs change.
5. services are planned with families' transportation and scheduling needs in mind.
6. someone on the staff can help families communicate with all the other professionals serving them and their children.
7. the program administrators makes families feel comfortable when they have questions or complaints.
8. the IEP, or IFSP (Individualized Family Service Plan, is used as a "plan of action". 
9. there is a comfortable way to work out disagreements between families and staff members.
10. helps families when they want information about jobs, money, counseling, housing, or other basic family needs.

11. gives other children in families support and information about their brother’s or sister’s disability.

12. gives them information on how to meet other families of children with similar needs.

13. offers special times for fathers to talk with other fathers and with the staff.

14. offers information in a variety of ways (written, videotape, cassette tape, workshop, etc.).

15. helps families expect good things in the future for themselves and their children.

**STAFF MEMBERS...**

16. are available to go to doctors or other service providers with families to help ask questions, sort out information, and decide on services.

17. help families learn how to teach their children special skills.

18. give information to help families explain their children’s needs to friends and other family members.

19. help families plan for the future.

20. don’t ask families about personal matters unless it is necessary.

21. respect whatever level of involvement families choose in making decisions.

22. don’t rush families to make changes.

23. help families feel they can make a positive difference in their children’s lives.

24. give families time to talk about their experiences and things are important to them.

25. are honest with families.

26. create ways for families to be involved in making decisions about services.
27. give families clear and complete information about their children's disability.

28. tell families what they have learned right after their children's evaluation.

29. don't act rushed or in a hurry when they meet with families.

30. don't ask families to repeat information that is already on file.

31. don't try to tell families what they need or don't need.

32. help families feel more confident about working with professional

33. give clear and complete information about families' rights.

34. give families clear and complete information about available services.

35. help families feel more comfortable when asking for help and support from friends and other family members.

36. regularly ask families about how well the program is doing and what changes they might like to see.

37. offer to visit families in their home.

38. offer ideas on how families can have fun with their children.

39. treat families as the true experts on their children when planning and providing services.

40. give families clear and complete explanations about their children.

41. help families learn how they can help their children feel good about themselves.

42. don't overwhelm them with too much information.

43. get to know families and let them get to know them.

44. help families use problem-solving skills for making decisions about themselves and their children.
45. give information that helps families with their children's everyday needs (feeding, clothing, playing, health care, safety, friendship, etc.).

46. help families see what they are doing well.

47. respect differences among children, families, and families' ways of life.

48. ask families' opinions and include them in the process of evaluating their children.

49. are friendly and easy to talk to.

50. help families feel more confident that they are experts on their children.

51. enjoy working with families and children.

52. help families to have normal lives.

53. explain how information about families will be used.

54. give families information about how children usually grow and develop.

55. help families to see the good things they are doing to meet their children's needs.

56. consider families' strengths and needs when planning ways to meet their children's needs.

**FAMILIES IN OUR PROGRAM...**

57. are included in all meetings on them and their children.

58. receive complete copies of all reports on them and their children.

59. are an important part of the team when their IEP, or IFSP (Individualized Family Service Plan), is developed, reviewed, or changed.
March 14, 2002

Dear:

I am a doctoral student in the Adult Education program at Florida International University conducting this study for my dissertation research. The purpose of this study is to identify factors that influence pediatric occupational therapists’ attitudes toward working with families of children with disabilities. The information obtained from this study will be used for curriculum design in academic programs and continuing education arenas to better prepare new graduates and clinicians when working with families with young children.

You have received this letter because I understand that you work in a pediatric setting. If you are not working in pediatrics, please indicate that on the enclosed postcard and return it to me. You need not fill out these surveys.

Please take 30 minutes of your time to complete the enclosed three instruments. They are the Professional Characteristic Questionnaire; Family-Centered Program Rating Scale; and the Professional Attitude Scale toward the IFSP. Your input as a pediatric clinician is greatly appreciated. All responses will be strictly confidential. Enclosed is a specialty bill to thank you for your participation in my research.

A self-addressed stamped envelope has been provided for your convenience. In addition, a self-addressed postcard has been provided. Please return the postcard with a work phone number or e-mail where you can be reached for follow-up. If you are interested in obtaining the results of this study, please indicate this on the postcard. Please return all 3 instruments completed within two weeks. If you have any questions, I can be reached at 305-348 3106 or by e-mail (Bloche@fiu.edu) or you can call my committee chair Dr. Len Bliss at (305-348-1903). Thank you for your help.

Sincerely,

Elise Bloch, OTR, BCP
Clinical Assistant Professor
Occupational Therapy Department
### Appendix E

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<td>Respect whatever level of involvement families choose in making decisions.</td>
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<td>Don’t act rushed or in a hurry when they meet with families.</td>
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<td>Give families clear and complete explanations about their children.</td>
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<td>Help families feel more confident about working with professionals.</td>
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<td>47</td>
<td>Respect differences among children, families, and families’ ways of life.</td>
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<td>22</td>
<td>Don’t rush families to make changes.</td>
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<td>17</td>
<td>Help families learn how to teach their children special skills.</td>
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<td>55</td>
<td>Help families to see the good things they are doing to meet their children’s needs.</td>
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<td>48</td>
<td>Ask families’ opinions and include them in the process of evaluating their children.</td>
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<td>Give clear and complete information about families’ rights.</td>
</tr>
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<td>Help families learn how they can help their children feel good about themselves.</td>
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<td>Give families time to talk about their experiences and things are important to them.</td>
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<td>35</td>
<td>Help families feel more comfortable when asking for help and support from friends and other family members.</td>
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<td>39</td>
<td>Treat families as the true experts on their children when planning and providing services.</td>
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<td>56</td>
<td>Consider families’ strengths and needs when planning ways to meet their children’s needs.</td>
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<td>Don’t ask families to repeat information that is already on file.</td>
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<td>Create ways for families to be involved in making decisions about services.</td>
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<td>59</td>
<td>Families are an important part of the team when their IEP or IFSP is developed, reviewed or changed.</td>
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<td>The IEP, or IFSP is used as a “plan of action”.</td>
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<td>Families receive complete copies of all reports on them and their children.</td>
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<td>Staff don’t overwhelm them with too much info.</td>
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<td>Staff enjoy working with families and children.</td>
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<td>Staff give families clear and complete info about families’ rights.</td>
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<td>The info staff members give families helps them make decision about their kids.</td>
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<td>Staff help families plan for the future.</td>
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<td>Staff give families info about how kids grow and develop.</td>
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<td>Families are included in all meeting on them and their children.</td>
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<td>Someone on the staff can help families get services from other agencies</td>
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<td>Services can change quickly when families’ or children’s needs change.</td>
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<td>Services are planned with families’ transportation and scheduling needs in mind</td>
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<td>Someone on the staff can help families communicate with all the other professionals serving them and their children</td>
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<td>The program administrator makes families feel comfortable when they questions or complaints</td>
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<td>There is a comfortable way to work out disagreements between families and staff members</td>
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<td>The program helps families when they want info about jobs money or other family needs</td>
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<td>The program gives other kids in families support and info about their brother’s or sister’s disability</td>
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<td>The program gives them info on how to meet other families of children with similar needs</td>
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<td>The program offers special times for fathers to talk with other fathers and with the staff.</td>
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<td>The program offers info in a variety of ways</td>
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<td>The program helps families expect good things in the future for themselves and their children.</td>
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<td>16</td>
<td>Staff is available to go to doctors or other service providers with families to help ask questions, sort out info, and decide on services.</td>
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<td>18</td>
<td>Staff gives info to help families explain their children’s needs to friends and other family members.</td>
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<td>36</td>
<td>Staff regularly asks families about how well the program is doing and what changes they might like to see.</td>
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<td>37</td>
<td>Staff offers to visit families in their home.</td>
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<td>Staff gets to know families and let them get to know them.</td>
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<td>44</td>
<td>Staff helps families use problem-solving skills for making decisions about themselves and their children.</td>
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<td>Staff helps families feel more confident that they are experts on their children.</td>
</tr>
<tr>
<td>52</td>
<td>Staff helps families to have normal lives.</td>
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</table>
VITA

ELISE M. BLOCH

Education

1986-1990 Queens College
New York, New York
Masters of Science in Education with Departmental Honors for
Superior Scholarship

1977-1980 New York University
New York, New York
Bachelor of Science in Occupational Therapy

1976-1977 Russell Sage College
Troy, New York

Awards

Teaching Incentive Program Award- FIU, 1996

Work Experience

August 1991 - Florida International University - Department of Occupational
Present Therapy
School of Health, Miami, FL
Clinical Assistant Professor - August 1996- Present
Instructor August 1992 -May 1996
Visiting Professor August 1991 - May 1992

August 1989 - Schneider Children's Hospital - Long Island Jewish Medical
Center
August 1991 New Hyde Park, NY
Senior Occupational Therapist

May 1987 - First Step Early Childhood Center
July 1989 Richmond Hill, New York
Therapist

December 1985 - Nassau County Board of Cooperative Education Services
April 1987 Westbury, New York
Occupational Therapist

November 1984 - Veterans Administration Medical Center
November 1985 New York, New York
November 1982 - September 1984
Visiting Nurse Association of Dallas
Kaufman, Texas
Occupational Therapist

February 1981 - September 1982
Long Beach Memorial Hospital & Extended Care Facility
Long Beach, New York
Staff Occupational Therapist

Professional Qualifications
- N.D.T. Training in Pediatrics
- Sensory Integration Certified
- Board Certified Pediatric Occupational Therapist
- Registered Occupational Therapist of the American Occupational Therapy Association #41 6271
- Licensed Occupational Therapist Florida License #0002949

Professional Affiliations
- American Occupational Therapy Association
- Florida Occupational Therapy Association
- Sensory Integration International

Juried Presentations
“Occupational Therapy and Family Centered Care” Florida Occupational Therapy Association Conference, Spring 2000

“Occupational Therapy and Family Centered Care” American Occupational Association National Conference, Spring 1997

‘Special Education Teachers Perceptions of Occupational Therapists,’ Great Southern Occupational Therapy Conference, Fall 1992

‘School Based Occupation Therapy,’ Great Southern Occupational Therapy Conference, Fall 1993

Invited Presentations
“Organizational Culture and Family-Centered Care” Joe DiMaggio Children’s Hospital April 2004

Other Professional Activities
Book reviewer for Occupational Therapy and Health Care Proposal reviewer for AOTA national conference

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