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THE PROCESS OF ADOPTION OF THE FAMILY-CENTERED MODEL AMONG SERVICE PROVIDERS

By

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ABSTRACT

THE PROCESS OF ADOPTION OF THE FAMILY-CENTERED MODEL AMONG SERVICE PROVIDERS

By

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Currently, a family-centered model of service delivery, requiring a strengths-focus and the active inclusion of families in the service delivery process, is being applied to diverse service delivery domains. Although providers have a generally positive attitude toward the family-centered model (e.g., Roush, Harrison, & Palsha, 1991), professionally-centered or child-centered service delivery is still predominant in the traditional human service system (e.g., Mahoney & O'Sullivan, 1990). It is important to understand which conditions facilitate the adoption of this model since this style of service delivery leads to improved client outcomes (e.g., Trivette, Dunst, & Hamby, 1996). This study examined the process of adoption of the model, considering predictors of provider attitude toward the family-centered model, and predictors of providers' current service delivery practices. Examination of survey data from 121 providers across 32 diverse human service agencies illustrates that providers' attitudes are influenced by their professional training, and their perception of the flexibility and autonomy in their organizational environment, but not by their tenure in their organization. Providers who had a positive attitude toward the family-centered model and providers who were members of an interagency team were more likely to employ family-centered practices. The implications of these findings for facilitating adoption are discussed.

For all human service providers who persevere in providing

empowering services to families.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

OVERVIEW

There is currently a movement in the human service delivery system to a family-centered, strengths-based model of service delivery[1] (Flint, 1993; Nelson & Allen, 1995). This model requires a focus on strengths and unmet needs versus client deficits (Dunst, Johanson, & Trivette, 1991). The family-centered model also requires that families guide the services they receive, and that clients' natural support networks are involved in the service delivery process (Dunst, Johanson, & Trivette, 1991). Finally, the family-centered model advocates that interagency partnerships exist in the delivery of services (Rounds, 1991). Even though this service delivery model can improve client outcomes (Trivette, Dunst, & Hamby, 1996), and is recognized by professionals as a desired model for services (Bailey, Buysse, Edmonson, & Smith, 1992; Bailey, Buysse, Smith, & Elam, 1992; Roush, Harrison, & Palsha, 1991), service providers are in various stages of delivering services according to the tenets of the family-centered model (Cohen & Lavach, 1995; Krehbiel, Munsick-Bruno, & Lowe, 1991; McBride, Brotherson, Joanning, Whiddon, & Demmitt, 1993; Mahoney & O'Sullivan, 1990; Mahoney,

[1] It is important to note that there are several current strengths-focused models of service delivery (e.g., strengths-based, person-centered, the Wraparound process) that share the central components of the family-centered model as operationalized in this study. This study refers to this innovative empowerment model of service delivery as the family-centered model, but focuses on the tenets of the model that are shared goals among all of the strengths-focus movements.

O'Sullivan, & Fors, 1989). Considering that service providers are the direct link to families in service delivery (Nelson & Allen, 1995), and can act as system change agents in diffusing this model (Bailey, Buysse, Edmondson et al., 1992) understanding what contributes to their adoption of the family-centered model is critical if widespread application of this model is to occur.

While individual provider attitude toward the family-centered model is generally positive (e.g., Bailey, Buysse, Edmonson et al., 1992; Roush, Harrison, & Palsha, 1991), the current literature has not yet established a link between provider attitude and actual behavior (Cohen & Lavach, 1995). Further, the existing literature has not yet explored provider attitude with individuals from a diverse array of service domains, and has not established what variables influence provider attitude toward the family-centered model. Finally, the literature has not examined what factors may translate positive attitude toward the model into actual family-centered practice. Given that the history of service delivery reform is not a promising one, and that many attempts at transforming service delivery have not been successful (Foster-Fishman & Keys, 1997), the process of transition to family-centered practice needs to be better understood if the hope is to facilitate this shift in service delivery philosophy.

In this study, the process of adoption of the family-centered model refers to two factors involved in the adoption of an innovation (Rogers, 1995): *attitude* toward the innovation and actual behavior, or service delivery *practice*. This study considered three components that potentially impact the process of adoption of the family-centered model among service providers: a) characteristics of the service provider (i.e., tenure and

professional training) which impact attitude, b) the context/ecology in which the change is expected (i.e., organizational environment) which impacts attitude, and c) the impact of provider involvement in an alternate ecology (i.e., family-centered interagency teams) on translating a positive attitude toward the model into actual family-centered practice.

The first component considered characteristics of the provider, for example, his/her experience in human service. There is evidence to suggest providers' characteristics, such as tenure (e.g., Foster-Fishman & Keys, 1997) and professional training background (e.g., Bailey, Palsha, & Simeonsson, 1991), are related to their attitude toward the family-centered model and their willingness to deviate from the status quo of human service delivery in their field. Given that implementing the family-centered model requires change not only in individual providers, but in their service organizations as well (Bailey, Buysse, Edmonson et al., 1992; Nelson & Allen, 1995), it is essential to look beyond characteristics of the individual in understanding the predictors of attitude. The second component considered that providers may be constrained or supported by their organizations in implementing the family-centered model, making it imperative to look at providers' perceptions of the flexibility of their work settings (Senge, 1990). Finally, the family-centered model requires interagency cooperation and communication (Rounds, 1991). This has led to the development of interagency service teams across the country. This is particularly important as the interagency team may provide an alternate ecology for the implementation of the family-centered model (Westby & Ford, 1993). This alternate ecology may provide a setting with norms for service delivery and working with families that differ from the norms in a

provider's home organization. Therefore, the third component considered that personal involvement in interagency teams impacts adoption of family-centered practices by increasing personal experience and commitment to the change initiative (Rogers, 1995). The impact of interagency team membership was examined in two ways: First, team membership was examined as instrumental in translating providers' positive attitudes toward the family-centered model into actual family-centered practice. In other words, being on a team may moderate the relationship between attitude and behavior. Second, the direct impact of team membership on the adoption of family-centered practices was examined.

This study addressed the following research questions: a) What predicts provider attitude toward the family-centered model? b) Is provider attitude toward the family-centered model related to their service delivery practices? and c) What role does interagency team membership play in influencing the adoption of family-centered practices?

To answer the proposed research questions, this study utilized an existing data base from a larger County-wide human service delivery system evaluation. The data for this study was collected from 121 service providers across 32 organizations which represent a variety of human service delivery domains (e.g., physical health, mental health, education). The examination of these research questions has led to a greater understanding of: a) the relationship of both provider characteristics and organizational environment to provider attitude and b) the impact of interagency team membership and attitude on the adoption of family-centered practices.

The following literature review will begin by providing background information regarding the requirements of the family-centered model, and how this model deviates in ideology and practice from the traditional human service system. This will be followed by a brief review of the efficacy of this model. Finally, a review of the literature relevant to the components of adoption detailed above will be presented: First, the predictors of attitude toward the family-centered model will be discussed. Second, the potential role of interagency team membership in translating provider attitude toward the model into actual practice will be explored.

Chapter 1

LITERATURE REVIEW

History of and Introduction to the Family-Centered Model

Public Law 99-457, federal legislation passed in 1986, requires that service providers actively include families in the development and execution of early intervention family services. While this law was written for cases in which a child or young adult has a developmental disability, similar movements are seen in the human service sector in various areas of intervention, including cases of chronic health problems (e.g., Brewer, McPherson, Magrab, & Hutchins, 1989; Krehbiel, et al., 1991), families "at risk" for child abuse or neglect (e.g., Nelson & Allen, 1995; Scannapieco, 1994), a range of emotional and physical disabilities (e.g., Friesen & Koroloff, 1990; Numinen, Haas, Yaroch, & Fralick, 1992), and in early education efforts (e.g., Pizzo, 1990).

There has been growing recognition that traditional human service approaches have failed to reduce rates of child abuse, delinquency, and school drop-out (Weissbourd, 1990). Consequently, many initiatives in the human service system are consistently moving toward utilizing a family-centered model which encompasses the requirements of P.L. 99-457, and redefines the potential role of families in intervention (Bailey, Buysse, Edmonson, & Smith, 1992; Nelson & Allen, 1995). As of 1993, sixteen states across the United States have created policy that requires human service agencies to adopt a family-

centered model, strengths-based model in the delivery of services (Flint, 1993).

The family-centered model includes four central components that significantly distinguish it from the traditional service delivery paradigm: a) consumer driven intervention, b) active family involvement, c) a focus on the family's strengths and needs rather than its deficits, and d) interprofessional partnerships that include families (Dunst, Johanson, & Trivette, 1991; Rounds, 1991). In addition, this style of service delivery challenges providers to see their clients at times and locations that are convenient for family members (Cohen & Lavach, 1995; Nelson, Landsman, & Deutelbaum, 1990). This may include going to a client's home or community at a time outside of the traditional business day.

Kaiser and Hemmeter (1989) suggest that the adoption of the tenets of Public Law 99-457 (the driving legislation of the family-centered model) can pose significant challenges for service providers. Among these challenges are the lack of comprehensive family intervention models in traditional human service, and a lack of training of providers to work in a family-centered manner with families. To begin to understand why transition to the family-centered model poses this challenge to providers, the contrasts between traditional human service and the family-centered model must be detailed.

Considering the Traditional Human Service Delivery Context

The adoption of the family-centered model requires more than a simple introduction of the model to human service organizations and human service providers. This model challenges many of the fundamental assumptions made in the traditional

human service system and represents a philosophical shift in the way services should be delivered (Bailey, Palsha & Simeonsson, 1991; Brewer et al., 1989; Dunst, 1985). These include assumptions about professional role, the role of the family, and the appropriate target of early intervention (Dunst, 1985; Humphry, 1995; Nelson & Allen, 1995). Challenging such fundamental assumptions can create great difficulty in the diffusion of an innovation (Bartunek & Moch, 1987; Foster-Fishman & Keys, 1997; Pelton, 1992; Rogers, 1995). Generally speaking the traditional human service delivery system contrasts the family-centered model in both ideology and practice.

Contrasts in Ideology

Ideologically, the family-centered model emphasizes that families have the fundamental right to direct the services they receive. This provides the family with a voice and a role in service delivery that is not present in the traditional system where the professional is viewed as the sole expert (Dunst, 1985; Tyler et al., 1983). In this way, the traditional system can be characterized as professionally-centered. Dunst, Johanson, and Trivette (1991) compare professional-centered and family-centered service delivery by indicating that family-centered service delivery is characterized by the professional being the agent of the client. In the professional-centered model, the role of the family is to trust the expertise of the professional, and receive what they have to offer often without a voice in the process. It would be remiss to discount this style of intervention as entirely unhelpful, but while its aim is to help, it also may lead to a "learned helplessness" in the receiver or an increased dependence on the helping situation (Dunst & Trivette, 1987; Tyler et al., 1983). Again, the family-centered model believes families will become

enabled and empowered through their active participation in the service delivery process (Andrews & Andrews, 1993; Dunst & Trivette, 1987; McBride et al., 1993; Nelson & Allen, 1995).

Another distinguishing feature of the family-centered model is that the ecology of the family/natural support network is often considered an asset. According to the family-centered model, the family ecology can not be overlooked, nor should it be minimized or peripheral to the goals of early intervention (Dym, 1988; Garbarino, 1988). In the family-centered model, the belief is that all family members should be viewed as an asset in the service delivery process, and as experts on what they need from the intervention. This is often not the case in the traditional human service delivery system.

Finally, the family-centered model calls for a focus on strengths and needs versus client deficits. This represents a significant departure from the traditional human service system where the identification of client/family dysfunction informs the development of a service plan (Tyler et al., 1983). By focusing on strengths, the provider views the family's capabilities and potentialities, and works with the family to design an intervention that capitalizes on these strengths.

Contrasts in Practice

In practice, the family-centered model emphasizes the families active involvement in service delivery, and stresses that the priorities, strengths, and goals of the consumer guide the service provided (Dunst et al., 199; Krehbiel et al., 1991; Scannapieco, 1994). In family-centered practice, the family should be involved in all phases of the intervention including assessment and planning for services (e.g., determining the goals

of service delivery). Further, partnerships should be developed between human service professionals and clients/families. This is not the case in traditional service delivery where the services provided are typically directed solely by the professional. The inclusion of the entire family in the design and implementation of services empowers the family, enabling the family to self-advocate and have control over the helping relationship (Trivette et al., 1996; Weissbourd & Kagan, 1989).

In addition, the family-centered model challenges the provider to focus not only on the client, but on the whole family unit (Weissbourd, 1990). For example, when considering early intervention, a child-centered model focuses on the child in need. Typically, the service provider completes an assessment of the child, develops a treatment strategy for the child, and then intervenes with the child as the primary focus of intervention (Dunst, 1985; Friesen & Koroloff, 1990). The family may be involved periodically, but most likely only as it relates to the child as the target of the intervention or as the "cause" of the child's problems. In the latter case, the family is thought of as patient rather than partner in the development and implementation of services (Friesen & Koroloff, 1990). In contrast, the family-centered model calls on service providers to recognize that a child is embedded in the context of his/her family (Bronfenbrenner, 1986), and that the strengths and needs of the entire unit must be considered in the design of services.

In summary, there are three major departures of the family-centered model from the traditional human service system that involve contrasts in both ideology and practice: a) the active and central role of the family in guiding service delivery, b) the shift to a

focus on the family unit and the natural support network from a focus on only the child, and c) a focus on strengths and unmet needs rather than deficits. The inclusion and pivotal role of families in this model may be one of the greatest areas of difficulty for providers who are asked to shift to this model. For example, Roush, Harrison and Palsha (1991) found that while providers generally support all other components of the family-centered model, they disagree that a parent's priority should be given more weight when there is a discrepancy between the priority of the parent and the priority of the professional.

A focus on strengths and unmet needs is also a challenge for providers given that reimbursement for services often demands a diagnosis and identification of dysfunction (Adams & Nelson, 1995). Thus, it is a significant challenge for providers to have a family-centered focus when their environment demands the opposite. Foster-Fishman, Salem, Allen, and Farhbach (under review) found that a provider's perception of the external environment (e.g., funders, policy makers, other organizations' leaders) being supportive of a strengths-based model of service delivery was the greatest predictor of whether they thought that the strengths-based/family-centered model would have a positive impact for themselves and their clients.

There may be many areas of relearning and retraining that are necessary for providers who are attempting to integrate the tenets of the family-centered model into their practice (Weissbourd, 1990). Considering the incompatibility of the norms and practices of the traditional human service environment and the family-centered model the adoption of this innovation is not an easy process for providers. The movement to a

family-centered model of service delivery requires a great deal of flexibility on the part of individual families, service providers, and state and local human service systems (Nelson & Allen, 1995; Pelton, 1992).

The Importance of Collaboration. In addition to the changes in individual practice, service providers are increasingly called to work cooperatively with other providers in delivering services. In its implementation, family-centered intervention involves two important *practices* regarding partnerships (Rounds, 1991). First, service delivery must include family/professional relationships. This requires not only that the family is an integral part of a partnership with the professional, but that the family's voice guides the intervention. Second, service delivery must include interprofessional and interagency partnerships. This requirement of the family-centered model has led to the development of early intervention interagency teams that attempt to implement family-centered interventions and facilitate communication between both service providers and families.

Concurrently, the need for interagency cooperation is being increasingly called for in diverse areas of intervention (Brassard & Gelardo, 1987; Nelson & Allen, 1995; Skaff, 1988). In response to the increasing needs of children and families, especially those with economic needs, interagency coordination has become a central component to effective intervention (Paavola, 1996). Brassard and Gelardo (1987) suggest that when community agencies function as a network in providing preventive and supportive services they may reduce negative stress on families "at risk". In a nationwide study of 15 programs concerning service delivery to seriously emotionally disturbed youth, MacFarquhar

(1993) found that interagency collaboration was most often cited by providers as contributing to the success of individualizing services for these youth. This study also found that reeducating providers to consider each youth's situation individually and to respond creatively was the greatest challenge. This finding is relevant to family-centered service delivery given that the individualized planning for families is a central component of this model (Deal, Dunst, & Trivette, 1989).

The use of interagency teams provides a setting where individuals can have a diversity of needs met, and providers can exchange information and work collectively to provide services to clients. Pandiani and Maynard (1993) found that the existence of interagency teams has a positive impact on interagency collaboration, on the service system, and on the actual services provided to children. However, they did not find significant improvement in family involvement in the service delivery process, in stable relationships between children and care givers, and in the quality of staff. This study highlights some of the areas of positive impact of the existence of teams, and some potential areas for improvement in interagency team interventions. Garshelis (1993) found that Individualized Plans (IP) created by interagency teams matched mother's plans better than individual providers' IP's, indicating that teams may more effectively implement this practice than individual providers acting alone. Both of these studies suggest that interagency teams have a positive impact on consumers, but further investigation on the role of team membership on individual provider practices needs to be done.

Efficacy of the Family-Centered Model of Service Delivery

The efficacy of the family-centered model, and the positive implications for consumers served from a family-centered paradigm have begun to be established across different service domains (Bradley, 1983; Marcenko & Smith, 1992; Scannapieco, 1994; Trivette et al., 1996; Weiss & Jacobs, 1988; Weissbourd & Kagan, 1989). For example, Trivette et al. (1996) found that consumers who were receiving services from a family-centered organization compared to a traditional professional-centered organization were more likely to feel empowered by the service delivery process, indicating greater control over accessing needed resources. In the field of child abuse and neglect, Scannapieco (1994) found that home-based family-centered services had a positive impact on family functioning, and were effective in reducing out of home placement of children with both low and high risk families.

Given increasing evidence of the efficacy of this model and the benefits to consumers, it is essential to better understand the factors that influence and/or facilitate the adoption of the family-centered model by human service providers. A first step in understanding the process of adoption of this innovative model is to attend to provider's attitude toward the model.

The Importance of Considering Attitude in the Change Process

Understanding attitude change is a necessary component of and a precursor to the adoption of an innovation (Meyer, 1996; Pecora, Delewski, Booth, Haapala, & Kinney,

1985; Rogers, 1995)[2]. In fact, both Meyer (1996) and Rogers (1995) suggest that a positive attitude toward an innovation is an essential factor in the successful implementation of the innovation. This assertion is evidenced in research in a variety of domains. For example, in their study of providers beliefs about the family-centered model, Humphry and Geissinger (1993) suggest that the degree to which occupational therapists' attitudes are consistent with the family-centered model will influence their ability to implement this approach. In work with teachers, Fuller (1969) (as cited in Bailey et al., 1991) asserts that the concerns that a teacher might have about a practice or procedure can be influential in their desire to learn about it or to implement it. In addition, Armenakis, Harris and Mossholder (1993) suggest that the perceived desirability of a change is an important predictor of a change being adopted. Further, they advise that a critical first step in facilitating readiness for a change is the creation of the appropriate attitudes and beliefs in organizational members.

Examining provider attitude toward the family-centered model is an important component when considering the process of adoption. It may be that having a positive attitude toward the family-centered model precedes integrating the tenets of the model into practice. The existing literature on the family-centered model has begun to assess providers' attitudes toward the family-centered model in certain service delivery domains.

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[2] In the proposed study provider attitude refers to beliefs, concerns, and values that providers have regarding the family-centered model.

Provider Attitude Toward the Family-Centered Model

Current research indicates that service providers working in early intervention in the field of developmental disabilities support the family-centered model, and generally have a positive attitude toward the model (Bailey, Buysse, Edmondson et al., 1992; Bailey, Palsha & Simeonsson, 1991; Humphry, 1993; McBridge et al., 1993; Pecora, 1985; Roush, Harrison & Palsha, 1991). For example, Roush et al. (1991) found that over 95% of their 203 preschool professional respondents indicated that they agreed or strongly agreed with statements indicating that families require individualized service approaches, that families should be equal partners in designing service delivery, and that effective interdisciplinary collaboration is an essential part of effective service delivery. Similarly, Bailey, Buysse, Edmondson et al. (1992) found that on a continuum, providers preferred family-centered practices to more traditional practices. These "ideal" practice ratings did not differ significantly from family's ratings of ideal practices. In addition, Bailey, Buysse, Edmondson et al. (1992) found that providers recognized that traditional service delivery needed to shift to meet these desired practices. Pecora et al. (1985) demonstrated that in a fairly short training period providers' attitudes shifted significantly to agreement with a family-centered philosophy. Although this does not demonstrate a lasting attitudinal change, it does illustrate providers' responsiveness to this philosophy of service delivery.

While the existing literature reports generally positive attitudes toward the family-centered model among service providers, these studies (e.g., Bailey, Buysse, Edmonson et al., 1992; Bailey, Buysse, Smith et al., 1992; Roush et al., 1991) were generally

conducted with a subset of providers who were part of organizations or service delivery programs that were directly impacted by Public Law 99-457, and mandated to provide services in accordance with the family-centered model (e.g., they were part of an organization that provided services primarily to individuals with developmental disabilities). The generalizability of these attitude findings to service providers from a variety of service domains must be applied cautiously. Currently, providers from a diversity of service domains (e.g., child protective services, mental health) with a variety of professional training backgrounds (e.g., social worker, educator, health professional) are asked to use family-centered philosophy and practice. This diverse array of providers is likely to exhibit more variability in attitudes toward the family-centered model given that the model is very newly applied to these domains of service delivery. This is important to attend to given that providers' professional training backgrounds (e.g., social work, education, health professions) are related to their attitude toward the family-centered model (Bailey, Buysse, Edmondson et al., 1992; Bailey, Simeonsson, Yoder, & Huntington, 1990; Bailey, Smith et al., 1992).

Given that attitude change is a necessary precursor in the adoption of an innovation (Armenakis, Harris & Mossholder, 1993; Meyer, 1996; Rogers, 1995), it is important to better understand the predictors of provider attitude toward the family-centered model. Attending to those factors that predict provider attitude toward the family-centered model may indicate how a positive attitude toward the family-centered model can be facilitated. In the existing literature on the family-centered model and on human service delivery reform a few variables have been identified that may impact

provider attitude toward the family-centered model. These include the provider's tenure, professional training background and their perceived flexibility and autonomy in their organizational environment.

Predictors of Provider Attitude

Providers' Tenure in Their Human Service Organizations. Research has shown that provider's tenure is negatively correlated with adoption of innovation in the human service system (Ban, 1995; Foster-Fishman, 1994). More tenured employees are more likely to defend the status quo than to embrace innovative approaches in service delivery that challenge the traditional system (Foster-Fishman & Keys, 1997). Roush et al. (1991) found that the service providers they surveyed all indicated that less emphasis was placed on family-centered issues than they felt was ideal. However, providers with more tenure in their service organization rated the current practice of the organization to be more family-centered than did providers with fewer years of experience. One explanation suggests that among the providers with more years of experience in human service, the status quo of family involvement in their organization may be closer to what they consider "ideal" while providers with less tenure are rating the same levels of family involvement as inadequate. Subsequently, those providers with more experience in the human service delivery system are likely to be more resistant to the changes involved in shifting to the family-centered model. They are not likely to have a positive attitude toward the change as it deviates from the norms in practice they have engaged in for years (Bailey, Buysse, Edmonson et al., 1992).

Provider's Professional Training Background. Another important variable influencing provider attitude toward the family-centered model is the provider's professional training background (Bailey et al., 1990). Nelson and Allen (1995) state that movement to a family-centered model of service delivery requires a redefinition of professional roles so that providers are more responsive to family needs, and more respectful of family's strengths. This need for this redefinition is likely to be different depending on the field in which a provider has been trained. Certain disciplines are better prepared to engage in work with families. For example, Bailey et al. (1990) found that nurses and social workers receive the greatest amount of professional training in working with families. Bailey et al. (1991) similarly found that social workers and nurses perceived themselves as more competent in working with families than educators and allied health professionals. Further, they found that providers' self-ratings of their skill in working with families and the discipline they were trained in were significantly correlated with the degree to which they *valued* roles that involved working with families. It appears that individuals are more likely to value that which they feel prepared to do. Considering the diversity of professional training for different roles in human service delivery (Bailey, Buysse, Edmonson et al., 1992; Mahoney, O'Sullivan, & Fors, 1989), it is important to examine provider's professional training history in relationship to provider attitude toward the family-centered model.

In a similar fashion, another aspect of provider professional training that may impact provider attitude toward the family-centered model is the degree to which family-centered practice requires behaviors that are inconsistent with the practice norms of a

given discipline (Bailey, Buysse, Edmonson et al., 1992). In being asked to implement the family-centered model, professionals are asked to incorporate new behaviors into their practice that may contrast their current service delivery practices (Dunst, 1985), or what is traditionally expected by their professional role. For example, Brown, Pearl and Carrasco (1991) report that one of the main barriers to the implementation of family-centered care in Neonatal Intensive Care Units (NICU) is perceived professional role. Therefore, the developmentalists on staff in the NICU are more likely than the physicians to have a positive attitude toward the family-centered model. It is possible that the physicians do not perceive collaboration with families as normative in their field while developmentalists may.

In summary, professional training background is likely to impact provider attitude toward the family-centered model because of differences in training (e.g., the amount of training provided to work with families), and because of differences in the degree to which the tenets of the family-centered model are divergent from the practice norms of a given field. It is important to note that very little research has examined this relationship. Building upon the work of Bailey et al. (1990), and Bailey et al. (1991) who found that social workers and nurses had a more positive attitude toward tenets of the family-centered model than other professionals this study examined this relationship, and explored some other professional training background differences.

Organizational Environment. The context in which the shift to the family-centered model is expected must also be examined in understanding what factors influence provider attitude toward the family-centered model (Bailey, Buysse, Edmonson

et al., 1992; Cohen & Lavach, 1995; Pelton, 1992). One central component of a provider's context is the environment of his/her service organization. Nelson and Allen (1995) conjecture that the greatest threat to family-centered family preservation initiatives are the inhospitable environments of large bureaucratic service delivery organizations. This punctuates the need to attend to the organizational environment when considering providers' attitudes toward the family-centered model.

Schneider, Brief, and Guzzo (1996) suggest that organizational culture, the prominent attitudes and beliefs of an organization (Louis, 1981), can be impacted by manipulating the aspects of employees environment that they can describe, including practices and procedures. The notion is that tangible elements of the organizational environment (e.g., rules, regulations, policies) will impact the belief system of the members of an organization. When considering provider attitude toward the family-centered model, two aspects of the organizational environment are especially important: a) providers perceiving flexible policies and practices of the organization and b) providers perceiving themselves as autonomous.

A flexible organizational environment is essential in facilitating members adoption of a new behavior (Senge, 1990). A lack of administrative support demonstrated by rigidity in policies and practices is thought to be one of the main barriers to the implementation of family-centered practice (Bailey, Buysse, Edmonson et al., 1992). Nelson and Allen (1995) suggest that "changes in agency practice and procedures are needed to support new professional roles and relationships with families" (p. 112). Mahoney, O'Sullivan and Fors (1989) assert that administrators need to modify their

rules and regulations to enable providers to spend more time working directly with families. In their study, thirty percent of the 344 direct service providers they surveyed reported that they spent no time with families in a typical week. Organizational constraints, such as a lack of time to spend directly with families, do not allow for family-centered practice to be implemented by providers. These constraints may limit providers flexibility to see clients in alternate settings (e.g., in their home or community) or to see clients outside of the traditional business day.

If flexible policies and practices that allow family-centered practice to ensue do not exist, this may indicate to providers that this model of service delivery is not valued in their organizational system. Given that organizational members are impacted by their organizational context (e.g., Louis, 1981; Schneider, Brief, & Guzzo, 1996) the devaluing of family-centered practice may directly impact providers' attitudes toward the family-centered model, and their perception of this model as a desirable change.

In addition, a provider's sense of autonomy in their organization is essential when introducing a change (Senge, 1990). This element of the organizational environment speaks to the extent to which employees feel they have control and influence within their work environment. Cohen and Lavach (1995) suggest that reform of the service delivery system requires organizational strategies that include democratic management principles that empower staff to engage in collaborative relationships with families and with other providers. This sense of autonomy in staff regarding the provision of services to families is essential as providers who feel more autonomous are also more likely to feel open to change and to support a change initiative (Hage & Aiken, 1966; Senge, 1990).

Subsequently, the degree to which provider's feel empowered to work with families in ways that deviate from the traditional system of service delivery may also impact their adoption of a positive attitude toward this change.

Addressing providers' perceptions of the flexibility and autonomy in their organizational environment is essential in understanding the process of adoption of the family-centered model. The examination of the relationship between these perceptions and providers' attitudes toward the family-centered model may provide evidence that the organizational environment must provide support, flexibility and autonomy to service providers if they are expected to integrate the tenets of the family-centered model into their work with families.

Summary of the Predictors of Attitude. In summary, provider tenure, professional training background and organizational environment may impact provider attitude toward the family-centered model. Given that tenure within human service is generally associated with a stronger adherence to the status quo, and a greater resistance to change, providers' tenure is likely to impact attitude toward the family-centered model (Ban, 1995; Foster-Fishman, 1994). Considering that there is a great deal of variability in the ideology and practice in different fields, and differential preparation to work with families, provider's professional training background may also impact attitude (Bailey, et al. 1991; Bailey, Buysse, Smith et al., 1992). Finally, the providers' perceptions of the degree of flexibility and autonomy in their organizational environment may predict providers' attitudes toward the family-centered model. Although it is important to understand the predictors of attitude, it is also necessary to address and explore the lack

of connection between attitude and behavior in the current literature on the family-centered model.

Relationship of Provider Attitude and Behavior

The current literature on the family-centered model has not yet established a link between provider attitude toward the family-centered model, and their actual service delivery practice. While some service providers appear to recognize the value of the family-centered model of service delivery for clients, and endorse the application of this model to early intervention work (e.g., Bailey, Buysse, Edmonson et al., 1992; Bailey, Buysse, Smith et al., 1992; Roush et al., 1991), they do not necessarily implement this philosophy into their practice (Bailey, Buysse, Edmonson et al., 1992; Mahoney & O'Sullivan, 1990; McBride et al., 1993). In fact, there is evidence to support that the majority of early intervention programs continue to use a child-centered clinical intervention model with a fairly limited inclusion of families (Mahoney et al., 1989; Mahoney & O'Sullivan, 1990). In addition, research has demonstrated that there is a discrepancy between providers' beliefs and attitudes regarding ideal family-centered practice, and their actual practice (Bailey, Buysse, Smith et al., 1992; Balcazar, Keys, & Henry, 1991; Mahoney & O'Sullivan, 1990; McBride et al., 1993). In their qualitative study, McBride et al. (1993) found that only five of 14 professionals that participated in their study made statements that illustrated that their first priority was to the child. They interviewed both professionals and parents, and found that although professionals understood and endorsed the family-centered model, they were less likely to put it into practice. McWilliam and Snyder (1995) found similar evidence that service provider

practice is not yet consistent with the tenets of the family-centered model. They distributed a survey to families, and found that families were not included in the service delivery process to the extent that they wanted to be. Together, these studies indicate that current practice is not yet consistent with the family-centered model as desired by families or by service providers, however, this literature does not examine if there is a functional relationship between attitude and behavior.

The current literature on the family-centered model has only begun to illuminate the factors involved in influencing service provider adoption of family-centered practice. Although attitude change is one component necessary for this transformation in service delivery to take place (Pecora, et al., 1985; Rogers, 1995), the lack of connection between attitude and behavior indicates the need for a closer look at the adoption process among providers, and at the relationship of provider attitude and behavior. Questions remain regarding whether there is a relationship between attitude and behavior, and further, what facilitates the transformation of a positive attitude toward this model into actual family-centered practice. In an attempt to more closely examine the relationship between attitude and behavior, this study examined both the direct effect of attitude on behavior, and the impact of a particular alternate setting, the "family-centered" interagency team on the adoption of family-centered practices.

Provider Involvement on Interagency Teams

The literature on the family-centered model does not yet investigate if a provider's membership on a family-centered interagency team influences his/her implementation of the family-centered model. Since the interagency team is one of the primary components

of putting the family-centered ideology into practice (Rounds, 1991), it seems the potential impact of team membership on provider implementation of the family-centered model should be investigated.

There are two potential explanations for the role team involvement plays in facilitating the adoption of family-centered practices: First, it may be that team members are simply more likely to implement family-centered practices than non-team members. This may occur for a number of reasons: First, seeing the family-centered model put into practice may create a forum for learning by example. In the interagency team setting, less experienced service providers can learn from those who are more experienced in implementing the family-centered model (Bailey et al., 1991). This is consistent with social-learning theory which suggests that individuals learn new behavior by modeling the behavior of others (Bandura, 1977). In addition, Sagie and Koslowsky (1996) suggest that personal involvement is one necessary component in the adoption of an organizational change. Service providers' personal involvement and exposure to the successful outcomes of the family-centered model may lead them to implement the tenets of the model in their own practice. Similarly, Rogers (1995) suggests that the observability of an innovation or the degree to which individuals can view the results of an innovation impacts their likelihood of adopting it. This visibility also inspires peer communication, and speeds the process of adoption (Rogers, 1995).

Finally, staff involvement in interagency teams may enhance the adoption of an innovation in human service because of the opportunities for shared work and responsibility that emerge when staff are directly involved in an initiative that includes

partnerships with other providers. These opportunities may be harder to achieve in the absence of team membership. Nelson and Allen (1995) suggest that "increased involvement of service providers in treatment teams leads to a sharing of clinical skills, innovations, and successes and of responsibility of the risks inherent in family preservation" (p.118). This process of shared work and decision making is thought to lead to greater "ownership" of a change, leading to an increased likelihood that the change will occur (Fullan, 1982). As staff become increasingly involved in initiatives they may discover the reciprocity of interacting with other service providers, and may become more invested in the change process incorporating the tenets of the family-centered model into their everyday practice.

The first explanation for the role of team membership in the implementation of family-centered practices suggests that being a team member has a *direct* effect on the adoption of family-centered practices. However, a second explanation is also plausible. While this study hypothesizes that providers having a positive attitude toward the family-centered model (i.e., a belief the model will result in positive consequences) may directly impact behavior, the translation from attitudes to behavior is likely to be a challenging one given the deviation of this model from the status quo of service delivery and the incompatibility of the traditional service delivery environment. Given the complexity of implementing family-centered practices, it may be the interaction of providers' attitudes toward the model and team membership that leads to the implementation of family-centered practices. This explanation suggests that having a positive attitude toward the family-centered model may not be enough to lead to changes in practice in the absence of

team involvement. This implies it is *when* providers are members of a team that having a positive attitude toward the model influences the adoption of family-centered practices. Thus, being a team member may *moderate* the relationship between attitude and behavior.

The reasons explaining a direct relationship between team membership and implementing family-centered practices could also explain how interagency team membership could moderate the relationship between attitude and behavior. For example, a positive attitude toward the family-centered model *in the absence of* the opportunity for shared work and "ownership" or an opportunity to model the behavior of others may not result in providers' adoption of family-centered practices. However, another reason why team membership could lead to behavior change as a moderator between attitude and behavior is that the team setting may provide an alternate ecology and forum for the implementation of the family-centered model that is not present in other settings in which providers work. Considering that the team has been formed specifically to put this model of service delivery into practice, this setting is likely to have its own set of norms for behavior. Given that individuals are influenced by the dominant norms and practices of the organizations they are a part of (Louis, 1981), the interagency team may provide a social setting where providers' adoption of family-centered practices is facilitated. This is particularly important considering that providers' home organizations may not provide a viable context for the adoption of family-centered practices while the team setting may. Thus, the relationship between having a positive attitude toward the family-centered model and implementing family-centered practices

may be facilitated in an environment that views family-centered service delivery as desired and normative.

In summary, interagency teams may impact adoption of family-centered practices through two avenues: First, being a team member may directly impact adoption of family-centered practices. The team may provide an opportunity to view the successful implementation of the model, may increase the observability of the desired change, and may provide a setting where providers experience a greater sense of shared work and responsibility. In addition, providers may have the opportunity to model their behavior by learning from others who have more experience with family-centered practice. Second, interagency team membership may moderate the relationship between attitude and behavior. The interagency team may provide a necessary alternate ecology or social setting with different norms for service delivery practice than the traditional service delivery system and the necessary infrastructure for implementing family-centered practices.

Family-Centered Practice Indicators

As detailed earlier, adopting the family-centered model requires specific changes in practice. This study focuses on five central tenets of this model. The first two of these tenets are that the intervention be consumer driven and that families be actively involved in the service delivery process (Dunst et al., 1991). More specifically, indicators of family involvement and family direction of service delivery include the identification of goals with both clients and families involved as an integral part of the goal setting process.

The third tenet of the family-centered model requires providers to focus on the family's strengths and needs rather than its deficits (Dunst et al., 1991). The degree (e.g., the number of strengths and needs identified) to which a provider can identify strengths and needs is a first indicator of this tenet. Also, the degree to which the strengths identified transcend the individual client level and involve the natural support network (e.g., viewing a parent, friend or teacher as a strength) is an indicator of the implementation of the family-centered model. Identifying the needs of the family as a whole indicates that a provider is looking beyond the individual as the target of intervention. Finally, when considering the identification of needs, needs rather than deficits must be the focus of the intervention. This is an important distinction in family-centered service delivery; needs can be met by resources available in the community and do not connote "dysfunction" on the part of the individual. On the contrary, a focus on deficits involves specific characteristics of the individual or family that references some "dysfunction" or something they are incapable of doing. For example, social support is a need, while a lack of social skills is a deficit. Further, the needs identified should directly inform the development of goals.

The fourth tenet of the family-centered model is the degree of flexibility a provider exhibits in the location and timing of their interaction with families (Cohen & Lavach, 1995, Nelson, Landsman, & Deutelbaum, 1990). Consumer driven intervention includes traveling to locations that are accessible to clients/families (e.g., in their home or community) at times that clients/families can meet. This is an important element of the family-centered model given that the special needs of some clients/families often include

barriers to transportation. These barriers to accessibility of services are often neglected by the traditional service system. In addition, seeing the family in the home facilitates the creation of egalitarian relationships between professionals and families (Cohen & Lavach, 1995).

The first four tenets of this model involve aspects of providers' interactions with clients/families in the service delivery process. The fifth tenet of this model is somewhat distinct as it requires providers to engage in interprofessional partnerships (Dunst et al., 1991, Rounds, 1991). This is essential because the family-centered model calls for providers to meet the complex needs with which families desire support. Meeting a diversity of needs can rarely be accomplished by one provider or by one service agency. Thus, the degree to which professionals exchange information and involve other providers or service agencies in service delivery and planning is an important indicator of implementation of the family-centered model.

In this study, implementing family-centered practices refers to the implementation of all of the components described above. Therefore, the extent to which providers engage in each of these practices is an indication of the degree of "family-centeredness" they employ in their delivery of services. In summary, these tenets include: 1) consumer driven intervention, 2) family involvement in the service delivery process, 3) a focus on strengths and needs versus deficits of both the client and family, 4) flexibility in when and where clients are seen, and 5) cooperation and communication with other service providers in the delivery of services.

Conceptual Model

Description of Conceptual Model

Insert Figure 1 about here

Figure 1 illustrates the conceptual model tested in this study. This model predicts that individual and context variables (professional training, tenure, and organizational climate) influence provider attitudes toward the strengths-based/family-centered model. In turn, this model suggests that providers' attitudes toward the model impact their adoption of family-centered practices. Further, this model predicts that interagency team membership moderates the relationship between provider attitude toward the consequences of the family-centered model and provider adoption of family-centered practices. Finally, this model implies that interagency team membership has a direct additive effect on the adoption of family-centered practices.

Research Questions

This study addressed the following research questions: a) What predicts provider attitude toward the family-centered model? b) Is provider attitude toward the family-centered model related to their service delivery practices? and c) What role does interagency team membership play in influencing the adoption of family-centered practices?

Hypotheses

Individual Characteristics

1a. Social workers and nurses will have a more positive attitude toward the family-centered model than other human service professionals (e.g., allied health professionals).

1b. Provider's tenure in his/her service organization will be negatively related to provider adoption of a positive attitude toward the family-centered model.

Organizational Environment

2. Providers who perceive their organizational environment as providing staff autonomy and flexible policies and practices are more likely to adopt positive attitudes about the family-centered model.

Provider Attitude

3. Provider attitude toward the family-centered model will impact his/her adoption of family-centered practices.

Interagency Team Membership

4a. Providers who are members of an interagency team will be more adopting of family-centered practice than those who are non-members.

4b. Membership on an interagency team will moderate the relationship of providers' adoption of positive attitudes toward the family-centered model, and their adoption of family-centered practice. More specifically, team members' attitudes will be related to behaviors and non-team members' attitudes will not be related to behaviors.

Chapter 2

METHODS

Sample

This study utilized a pre-existing data base to analyze the research questions posed. This data for the larger study was collected from 328 human service providers across 32 organizations (a 62% response rate across organizations) in one mid-size county in a Midwestern state. This study utilized a subset of this data including 121 human service providers across all 32 organizations. The organizations in this sample represent a broad range of human service agencies (e.g., domestic violence shelters, Head Start, Community Mental Health, Public Health) and service domains (e.g., mental health, physical health, education) providing a very representative picture of the services offered in the County. In addition, these organizations represent both not-for-profit and profit organizations, government and community-based agencies and serve a variety of populations from families with small children to the elderly. Direct service providers and managers of service provision completed the survey. The majority of participants were between thirty and fifty years old. Twenty percent were over fifty years old, and thirteen percent were under thirty. Participants have worked in their current organizations from less than six months (4 percent) to over fifteen years (15 percent). Regarding education level, most participants had at least some college, with thirty percent having college

degrees, and twenty-nine percent with graduate degrees.

Procedures

The procedures in this study included four phases of data collection: a) recruitment of organizations, b) recruitment of service providers and survey distribution, c) survey collection and d) follow-up.

Recruitment of Organizations

To recruit organizations a fax was sent to organizational leaders describing the evaluation and requesting participation. Leaders indicated a willingness to participate by returning the fax providing some basic information (e.g., the number of employees) and indicating permission to be contacted. Upon receipt of the return fax, each leader was contacted by phone to arrange a time for a researcher to attend an existing staff meeting or to arrange another meeting to explain the study to potential participants, request participation and distribute the survey. Overall, 43 organizations were originally approached. Ten of these organizations declined participation because they did not do "direct" service provision, and did not feel their staff were appropriate for the study. In addition, one organization was appropriate for the study, but declined to participate.

Recruitment of Service Providers and Survey Distribution

A standardized protocol was presented at staff meetings to service providers. This protocol described the purpose of the evaluation, provided the staff members with some of the reasons for and benefits of participation, and provided an opportunity for staff to ask any questions. Staff were offered the opportunity to put their name in a lottery for one of five gifts certificates for a local mall. For fourteen of the thirty-two organizations,

presentations were made in person directly to staff. In other cases this was not possible due to the staff being located in many different places (e.g., jail, community-based locations) or due to the staff having mostly home visiting functions with no time in the office. In these cases (six of thirty-two), the presentation was made to supervisors and/or leaders, and the surveys were left for the employees in their mail boxes. The remaining twelve organizations were smaller and surveys were mailed to these organizations. In cases where the initial presentation was made only to leaders or supervisors or where surveys were mailed, calls were made to all employees alerting them that the survey was left for them in their box or mailed to them. This call also served to highlight points from the verbal presentation, and answer any questions. All surveys were accompanied by a letter that reiterated the information from the presentation, and included a telephone number for participants who had questions.

Survey Collection

For four organizations, the survey was completed by staff who chose to participate directly following the meeting. For nineteen organizations, a sealed drop box was left for service providers to deposit their completed survey. For the remaining organizations (n = 9), surveys were returned via mail. Return postage was provided when staff did not have access to a central location for a drop box, or when the number of staff was very small. If a drop box was left, after a two week period from distribution, the box would be checked and emptied.

Follow-up

After drop-boxes were emptied, and the deadline to return surveys by mail had

passed for each organization, follow-up efforts began. The follow-up protocol varied slightly depending on the size of the organization. The goal was to achieve at least a 60% return rate from each organization. In medium or small sized organizations (20 employees or less), providers who had not completed the survey were called by phone. Participants were informed that the due date for the survey return was extended, and that they could still return the survey by the new deadline. They were also asked if they needed another survey mailed or faxed to them. In larger organizations (21 employees and over), a fax memo was sent that included all of the same information provided in the telephone call. Arrangements were made with a contact person in the organization to have the fax copied and distributed in all of the participating employees' mail boxes. The new deadlines set were always set to allow two weeks for the return of the survey. After this second two-week time period would pass, follow-up efforts would begin again for organizations that still had return rates below 60%. In the second follow-up phase, individual calls were made to all participants regardless of organizational size. Providers were again informed that the deadline for the survey return had been extended, and that another copy of the survey could be mailed or faxed to them. For one organization, a third follow-up phase was necessary to achieve a representative sample. In this final phase, a second visit was made to the organization for a second presentation to staff to request participation.

Survey Instrument

The survey utilized in this study had three versions; one that focused on providers' service coordination behavior (n = 127), one that focused on assessing the

degree to which providers had strengths-based/family-centered practices in their service delivery (n = 145), and one that included both outcome measures (n = 56). Participants in organizations with ten or fewer employees received the version of the survey which had both outcome measures. In organizations with more than ten employees, participants were randomly given one survey or the other. In all versions of the survey, demographic data, providers involvement in the human service initiatives in the County, providers' perceptions of their organizational environments, providers' perceptions of the institutional environment, and providers' attitudes toward a strengths-based model and service coordination were measured. All measures used were developed specifically for the larger study. In addition, open-ended questions were asked regarding barriers to implementation of the strengths-based model and service coordination, and regarding the potential impacts of the strengths-based model and collaboration. For the purposes of this study, data was utilized only from the surveys which included a completed family-centered, strengths-based outcome measure (N = 121). The following sections of this survey were utilized in this study and are described below: Demographic information, initiative involvement, providers' perception of the internal working environment, provider attitude toward the strengths-based/family-centered model, and providers' service delivery practices with families (see Appendix A for a copy of these components of the survey instrument).

Demographic Information

Categorical data was collected on the provider's age, gender, ethnic background, education, organizational level, and the number of years they have been with their

organization.

Professional Training Background

Provider role/training was recorded as part of initial recruitment for this study, and with follow-up telephone calls to key informants in each organization. Initially, each organizational leader provided a staff list, including professional role (e.g., case manager, therapist) when he/she agreed to participate. Sometimes this information included information on degree training (e.g., M.S.W.). When the latter information was not included (e.g., case manager as a role would not indicate training background) organizations were called, and professional degree or training for each provider was ascertained. While it would have also been informative to look at the provider's current role, examination of the roles of participants revealed such diversity that they could not be grouped adequately for examination. In addition, some roles were organization specific making analysis of current role across organizations unfeasible. For these reasons, professional role/training was operationalized as the professional degree received. In this study, the provider's professional training background was coded according to "rank" of alignment of this training with the family-centered model. Based on the findings of previous literature, social workers and nurses were coded with a one, as more family-centered, and teachers, paraprofessionals, allied health professionals, and other professionals with a zero, as less family-centered. In addition, all professional training backgrounds (see Table 1 for a list of the groups and their sample size) in the sample were dummy coded (1, 0) so exploratory analysis could be done of any differences between professional training backgrounds (e.g., social workers,

psychologists, paraprofessionals). This dummy coding allowed individual regressions to be run so that each professional group (assigned a one) could be compared to all others (assigned a zero). This permitted an exploratory examination of each professional training background relative to others regarding the adoption of a positive attitude toward the family-centered model. Given the limited research examining the impact of professional training on attitude toward the family-centered model, more hypothesis directed comparisons were not viable.

Insert Table 1 about here

Human Service Initiative Involvement

With the assistance of key informants in the County, 11 current human service initiatives were identified (e.g., task forces, interagency teams, drug prevention initiatives). This measure asked providers to indicate which initiatives they were involved in, and the extent of their involvement in each. Two of the 11 initiatives were interagency teams. Providers were asked to indicate their extent of involvement in each initiative by utilizing a 4-point Likert-type scale, 1 indicating no involvement with the initiative and 4 indicating the provider was very involved with service delivery or planning for the initiative. A dichotomously scored variable was created indicating interagency team involvement. Those providers who indicated any involvement in either of the interagency teams listed received a score of "1" indicating they are interagency team members. Those providers who indicated no involvement in the interagency teams

received a "0" indicating they have no interagency team involvement. This score was utilized to separate team members from non-team members to: 1) examine the moderating relationship of team membership between provider attitude and actual practice, and 2) the direct effect of team membership on adoption of family-centered practices.

Organizational Environment

A 12-item scale constructed specifically for this study measured the providers' perceptions of the internal environment of their organization. Utilizing a 6-point Likert scale, providers were asked to indicate their agreement or disagreement regarding several aspects of their work environment (one indicating strong disagreement, and six indicating strong agreement). Exploratory factor analyses of this scale yielded two factors. The first factor included five items regarding the providers' perception of autonomy in their work environment (e.g., employees have significant autonomy in determining how they do their jobs, management trusts employees to get the job done). The second factor included two items regarding the provider's perception of policies in their organization that allow flexibility in the times and locations that clients can be met (e.g., policies allow for flexibility in where services are delivered). The alpha coefficient for the first factor is .86. The alpha coefficient for the second factor is .91. The mean score of both factors (or the mean score of the scale with both dimensions included) was utilized for analyses in this study.

Attitudes Toward a Strengths-based Model

A 12-item scale measured providers' perceived impact of the implementation of a

strength's based model. Providers responded utilizing a six-point Likert scale (one indicating strong disagreement and six indicating strong agreement) to statements regarding multiple levels of impact including the County, the client, the provider and the provider's agency. Exploratory factor analyses yielded two factors. Two subscales were formed based on these factors. The first subscale included four items regarding the positive consequences of the strengths-based model for providers, their clients, and their home organization (e.g., the strengths-based approach will result in improved client outcomes, the strengths-based approach will increase my clients ability to independently access service in the future). The second subscale included five items regarding the negative consequences of the strengths-based model for providers, their clients, and their home organization (e.g., the strengths-based approach will require me to work with clients in a way that is inconsistent with my training, the strengths-based approach will confuse the roles of clients and providers). The alpha coefficient for the first subscale is .90. The alpha coefficient for the second subscale is .83. These subscales are correlated -.60. To create a single scale score, the difference between the mean scores of these two subscales was used in this study. The mean of the negative consequences subscale was subtracted from the mean of the positive consequences subscale yielding a difference score that is an index of how positive the service provider's attitude is toward the strengths-based philosophy.

Strengths-Based/Family-Centered Practice

The strengths-based/family-centered behavior measure was developed to ascertain aspects of providers' service delivery practices with clients. Because of the

multidimensional nature of the family-centered model, this measure attempted to capture many indices of the implementation of this model. These indices include assessing strengths and needs versus deficits, considering the clients natural support network, creating goals for service delivery, involving clients and families in the creation of goals, utilizing alternate settings, and involving other agencies in service planning. Providers were asked to reflect on their last client, and detail certain information regarding the service plan that was developed. Providers also gave some general demographic information (age and race of client, and how long they have been seeing the client). The measurement of the six indices of family-centered practice are described below. The description of these indices is followed by an explanation of how four of these indices (and their components) were combined to create an overall score reflecting the extent to which family-centered practices are currently being implemented by providers.

Assessing Strengths and Needs. Providers were asked to provide a written description of the client's strengths and needs. To measure strengths, the number of strengths listed was counted and coded. Only *legitimate* strengths were coded. For example, in cases where a provider's response appeared sarcastic (e.g., watching t.v., sleeping) responses were not counted as strengths.

To measure provider's identification of needs consistent with a family-centered approach, the needs listed by providers were content analyzed and coded into five categories: basic living needs (e.g., housing, food, clothing, transportation), community resource/natural support network needs (e.g., WIC, support from family/friends), promotional skill building needs (e.g., education), compensatory skill building needs

(e.g., parenting skills, anger management skills), and treatment needs (e.g., counseling, therapy, medical assessment). The first three categories of needs were summed to reflect the total number of needs identified that were *uniquely* consistent with the family-centered model. These needs (basic living, community/network, and promotional skill building needs) reflect more of the broad-based and diverse needs of families. Often these needs transcend the categorical nature of traditional service delivery, are individualized, and involve the natural support network and other community resources. The last two categories (compensatory skill building and treatment) while often necessary components of service delivery do not distinguish the family-centered approach to service delivery from a traditional approach to service delivery. Therefore, only the needs listed in the first three categories were included in the final outcome measure of family-centered practices.

The content analysis also revealed that providers sometimes listed individual and family deficits instead of needs. Therefore, the number of client and family deficits identified as "needs" by providers were also recorded. This category included all items that an individual would not *need* to achieve "healthy" living (e.g., anxiety, stress). For example, identifying that an individual is depressed illustrates a deficit-focus while identifying that an individual needs social support illustrates a need. To ascertain the provider's ability to identify needs rather than client deficits, the number of deficits identified were subtracted from the number of needs the provider identified that were consistent with the family-centered model.

Transcending the Individual Level. Another goal of family-centered, strengths-

based services is that the client's natural support system be considered in the service delivery process. This includes not only identifying the strengths of the client, but the strengths of their natural support network, and their surrounding community (e.g., good teacher, caring aunt, lives near day care facility). Similarly, the needs identified should include the client's family or natural support network (e.g., if the target client is the child, the provider might also identify the need for a parenting support group for the mother). To asses the extent to which providers considered the clients context, strengths and needs were also assigned one of two categories: individual level (e.g., motivated, creative), family/natural support network level (caring aunt, supportive family, parenting skills). The number of strengths identified on the family level were totaled as were the number of needs identified on the family level. These totals provide an estimation of the degree to which a provider looked beyond the individual client in the identification of strengths and needs.

Involving Clients and Families in Goal Setting. To assess the degree to which providers involved families in the identification of goals, providers detailed the goals that were developed for the client, and indicated who was involved in developing the goal (the provider, client, and/or family). For each goal a provider identified, a 1 or 0 was entered for each potential participant (provider, client, family member) in the identification of goals. This provided a picture of who was involved in the goal setting process for each goal included in the service plan. One score was generated for each provider to reflect a situation where clients and/or families were involved in the development of goals. This ratio was created by summing the number of goals identified by families, clients or both,

respectively, and dividing by the total number of goals (a score of "1" indicating that families, clients, or both were involved 100% of the time). This ratio provides an estimation of the degree to which providers are including clients and/or families in the creation of goals.

Identifying Goals. To assess the degree to which the needs of families were being addressed as goals for intervention, the *number* of goals identified was counted and coded. This sum reflects the degree to which providers and families were working toward meeting the needs that families presented. In some cases, providers identified a number of needs without a breadth of goals. While matching needs and goals was not possible (one to one match was often difficult as needs/goals are not often clear cut stimulus/response relationships in this style of service delivery), the total number of goals serves as a proxy for the breadth of needs being addressed by the goals identified.

Involving Other Agencies and Providers in Goal Setting and Implementation. Three questions were asked to assess whether or not providers were including the client's natural support system, and/or other agencies in their service planning (e.g., Did you include people from your client's natural support system in identifying or implementing the above goals or objectives? Did you talk to providers in other agencies in order to develop or implement the above goals or objectives?). Providers responded by indicating "yes" they engaged in this activity or "no" they did not engage in this activity. These items were utilized primarily for descriptive purposes and for comparison of the providers who are interagency team members with those who are not.

Seeing Clients and Families in Alternative Settings. Two items asked providers

to indicate the percent of cases they saw in alternative settings (e.g., home, community) and the percent of cases they saw at times outside of the traditional business day. These items were utilized for descriptive purposes, and for comparison of the providers who are interagency team members with those who are not.

Coding and Interrater Reliability for Each Component of Family-Centered Service Delivery. The first four indices described above (assessing strengths and needs, consideration of the natural support network, involving clients and families in goal setting, and identifying goals) were coded utilizing a coding scheme developed specifically for this study (see Appendix B for the coding templates). A single rater coded all of the data for this study. A second rater coded a subset of this data (a random selection of twenty-five percent of all cases). The primary rater and second rater had interrater agreement of 93% for this subset of the data. This percent agreement was ascertained by counting all data points agreed upon and dividing by the total number of points. Therefore, this percent reflects the total number of data points which both raters agreed upon. All areas of disagreement were discussed until both coders agreed on a final decision for that particular data point. In addition, an expert in the implementation of family-centered service delivery independently verified the coding framework as a valid measure of indicators of the family-centered model of service delivery.

Creating the Overall Family-Centered Outcome Measure

An outcome variable reflecting the extent to which family-centered practices are being implemented was created by combining five of the indicators of family-centered practice operationalized in this study. These indices include: a) the identification of

strengths, b) the identification of needs consistent with the family-centered model (broad-based needs: e.g., basic living needs, versus only traditional, categorical treatment needs), c) the identification of goals, d) the inclusion of the family in the development of goals, and e) the identification of the strengths, needs, and goals of the family (see Table 2 for the mean, standard deviation, minimum and maximum of each component of the outcome measure). These indices (and their components) were combined by summing each component consistent with the family-centered model, and subtracting one component (identifying deficits) which is antithetical to the implementation of family-centered service delivery.

Insert Table 2 about here

Therefore, to create the outcome variable, each of the following totals (representing five components of family-centered service delivery) were standardized to ensure equal weighting in combining the variables: a) total number of strengths, b) total number of basic living needs, community/network needs, and promotional skill building needs, c) the total number needs, strengths, and goals that transcend the individual level[3], d) the total number of goals, and e) the total number of deficits. These standardized totals were summed with the standardized "deficits" total subtracted to create an overall score.

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[3] This total included treatment needs and compensatory skill building needs of families. Although these elements of service delivery are more traditional in nature, this aspect of the outcome measure attempts to capture the degree to which the provider is including the family in the overall plan, therefore it was appropriate to acknowledge this inclusion as consistent with the goals of family-centered service provision.

The ratio created to reflect family/client involvement in goal setting was also standardized and added to this overall score. This final score reflects an overall family-centered practice score. Individuals who are implementing all components of this model frequently would achieve the higher family-centered practice scores, while individuals who are implementing only one component infrequently would achieve lower scores. Thus, this overall measure indicates how much providers are implementing the various elements of family-centered service delivery overall. This family-centered practice score was utilized as the outcome measure in subsequent analyses.

Given that this outcome measure was created with six different indicators of family-centered practice reliability must be established as with any standard scale. Even though each component included in the measure can be thought of as an item, reliability analysis of "count" data often leads to reliabilities that are lower than those yielded with traditional scales (Cleary, 1981). In addition, assessing internal consistency of this data is less appropriate given that implementing one aspect of the model does not necessarily guarantee that other aspects of this model are being implemented, and each component represents a different dimension of family-centered practice. Still, the internal consistency of these variables was computed given that they were combined to form a single outcome score, and this was the most viable option for examining the reliability of the outcome measure. Cronbach's alpha coefficient was .65. This coefficient was computed with the deficit total reflected (i.e., reverse scored). This was done because the deficit total was subtracted from the total score rather than added. While this alpha is somewhat low this is may be due to the small number of "items" in the scale (n = 6), and

the skewness of the count data totals for each component. It is important to note that all of the components included in this final outcome measure are significantly correlated with at least two other components (and often three or four components) in the hypothesized direction (e.g., all positive except for the deficit total) (see Table 3 for a correlation matrix including the components of the outcome measure).

Insert Table 3 about here

Chapter 3

RESULTS

Descriptive Statistics

Means and standard deviations for all manifest variables in the conceptual model are included in Table 4. A correlation matrix including all variables represented in the conceptual model are presented in Table 5. An examination of scatter plots indicates that all significant relationships are linear in nature.

Insert Tables 4 and 5 about here

Provider's Attitude Toward the Family-Centered Model

While providers endorsed both positive and negative consequences of family-centered service delivery, on average, providers somewhat disagreed with statements regarding the negative consequences of the family-centered model (mean = 2.5, minimum = 1.0, maximum = 4.8), and somewhat agreed (mean = 4.5, minimum = 2.2, maximum = 6.0) with statements regarding the positive consequences of the model. Eighty-nine percent of providers at least somewhat agreed that the family-centered model will result in positive outcomes for themselves and their clients, while fifteen percent of providers at least somewhat agreed that this model will result in negative outcomes. Still, it is

important to note that very few providers (12%) expressed strong agreement with statements regarding the benefits of the family-centered model.

Provider's Family-Centered Practices

Providers identified an average of three strengths, yet 38% of the sample identified two individual level strengths or fewer. Only 29% of providers identified at least one strength or need on the family level, and even fewer (21.5%) identified a goal that involved the family. Only half of providers in the sample identified at least one basic living need of an individual or family (e.g., housing, food, clothing, transportation).

Examining the Proposed Research Questions

This study posed questions regarding: 1) the predictors of providers' attitudes toward the family-centered model, 2) the relationship between providers' attitudes toward the family-centered model and their service delivery practices, and 3) the role of interagency team membership in influencing the adoption of family-centered practices. To address these areas of inquiry path analysis, multiple regression analyses, hierarchical regression analyses and t-tests were performed.

In preparation for these analysis the histograms of all manifest variables were examined to evaluate the normality of the variables and the existence of any outliers. This examination revealed one outlier in the family-centered practice outcome measure. A correlation matrix was run both with and without this case and the results of these analyses were comparable. Further investigation of this outlier revealed that this score was not due to error. Given that this score was a true reflection of the outcome variable, and made no appreciable difference in the correlation matrix this value was retained in

subsequent analyses. Assumptions of multivariate normality, and linear relationships of manifest variables was established by examination of pp plots, histograms, and scatter plots of all variables in these analyses.

Each of the research questions and hypotheses posed in this study will be considered in the following sections. This presentation of findings will be followed by a description of the fit of a revised conceptual model, and details regarding the results of further suggested modification of this model.

Predictors of Provider Attitude

Hypotheses 1a, 1b, and 2 proposed providers' professional training backgrounds (specifically, social workers and nurses versus other professionals or paraprofessionals), providers' tenure, and providers' perceptions of the flexibility and autonomy in their organizations would impact their attitude toward the family-centered model. To address these hypotheses, path analysis utilizing LISREL was performed. Specific hypothesized paths will be detailed below (see Figure 2 for this portion of the conceptual model with standardized path coefficients).

Insert Figure 2 about here

Professional Training Background. As shown in Figure 2, professional training background was significantly related to attitude toward the family-centered model (standardized coefficient = .24, $t = 2.65$, $p < .05$). As hypothesized, social workers and nurses were more likely to have a positive attitude toward the family-centered model

when compared to other professionals and paraprofessionals.

To more fully examine the impact of professional training background on provider's attitude toward the family-centered model, a series of regression analyses were done predicting attitude toward the family-centered model with multiple dummy coded dichotomous variables reflecting different professional training backgrounds (e.g., social work, education, nursing, psychology, physical therapy, speech therapy). These analyses revealed that when examined individually, social workers ($n = 29$) were significantly more likely than other professionals/paraprofessionals to have a positive attitude toward the family-centered model ($t = 2.23$, $p < .05$). Those individuals with a training background in social work were more likely than other professionals and paraprofessionals to have a positive attitude toward the family-centered model. Interestingly, nurses ($n = 15$) were *not* significantly more likely than other professionals/paraprofessionals to have a positive attitude toward the family-centered model ($t = .64$, $p < .518$). This is important to note in light of the earlier finding that both social workers and nurses when grouped together had a more positive attitude toward the family-centered model than other professionals and paraprofessionals. However, given that nurses mean attitude score is close to the mean attitude score of social workers this difference may be due to the smaller number of nurses in the sample (15 / 121). Psychologists ($n = 9$) were significantly less likely than other professionals/paraprofessionals to have a positive attitude toward the family-centered model ($t = -3.18$, $p < .01$). This suggests that those individuals with a training background in psychology have less positive attitudes toward the consequences of the

family-centered model than other professionals and paraprofessionals. However, this finding must be considered cautiously given the small number of psychologists in this sample (see Table 6 for attitude means and standard deviations by professional training background).

Insert Table 6 about here

Tenure. Provider's tenure was not related to his/her attitude toward the family-centered model (standardized coefficient = -.01). The number of years providers were employed at their current organization was not related to their attitude toward the family-centered model.

Organizational Environment. Provider's perception of the flexibility and autonomy in their organizational environment was positively related to attitude (standardized coefficient = .13, t = 1.38, p = .17). While this relationship did not achieve significance with a two-tailed test, the hypothesis was directional and a one-tailed test reveals a trend toward a significant relationship (p = .08). This path may not have reached significance because in the subsample (n = 121) there was not enough statistical power for a significant relationship to emerge.

Previous regression analyses of this data when the full sample of 328 providers was utilized did find that this relationship was statistically significant. Because the subsample who received the family-centered outcome measure was randomly selected there are no systematic differences between the subsample who received the family-

centered practices version of the survey and the subsample who received other versions of the survey.

Given this issue of power and the larger sample that was available, to further examine the relationship between provider's perception of his/her organizational environment and attitude a multiple regression analyses was performed with an N of 303[4]. For this analysis, predictor variables (professional training background, tenure, and perception of the organizational environment) were entered in one block, and a standard regression analysis was performed. This analysis indicated that *both* providers' perceptions of their organizational environment (beta = .19, $t = 3.28$, $p < .01$), and providers' professional training background (beta = .23, $t = 3.70$, $p < .001$) were significantly related to their attitude toward the family-centered model. Consistent with the path analysis of the overall model, providers' tenure (beta = -.08, $t = -1.29$, $p = .197$) within their organizations was not significantly related to their attitude toward the family-centered model. It seems that with a larger N and subsequently more statistical power the relationship between the provider's perceptions of their organizational environments and their attitudes toward the family-centered model reaches significance. This confirms the trend evident in the path analysis. The more providers perceive their organization as providing flexibility and autonomy the more likely they are to believe that the family-centered model will have positive consequences for themselves, their clients, and their

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Twenty-five individuals were removed from the original sample of 328 because they did not complete the family-centered practices outcome measure adequately or because they served an elderly population that differed systematically from other providers in the sample working with families and younger individuals.

organizations.

Relationship Between Attitude and Behavior

Hypothesis 3 suggested that providers' attitudes toward the family-centered model would impact their adoption of family-centered practices. Confirming this hypothesis, structural equation modeling indicates that provider's attitude has a direct effect on provider's implementation of family-centered practices (standardized coefficient = .21, $t = 2.34$, p-value $< .05$) (see Figure 3 for the model including this path). As providers' attitudes are increasingly positive they are also more likely to be implementing family-centered practices in service delivery.

Insert Figure 3 about here

Understanding the Role of Interagency Team Membership

Interagency Team Membership as a Direct Effect. In the conceptual model presented in this study (see Figure 1, page 87), the impact of interagency team membership was illustrated in two ways: one avenue of impact proposed that interagency team membership would directly impact provider's adoption of family-centered practices. Specifically, Hypothesis 4a suggested that providers who are members of an interagency team would be more adopting of family-centered practice than those who are non-members. Path analysis utilizing LISREL indicates that being a member of a team is significantly related to adopting family-centered practices (standardized path coefficient = .26, $t = 2.86$, $p < .05$). Team members are implementing family-centered practices at a

greater rate than non-team members.

To further examine the differences between team and non team members, a series of t-tests were performed comparing the two groups on the following outcome indices: a) the number of strengths identified, b) the number of goals identified, c) the number of family-centered needs identified (e.g., basic living needs, community/natural support network needs), d) the percent of involvement of family-members in the creation of goals and the service delivery process (e.g., identifying strengths and needs of the family), e) seeing clients in alternate locations, f) seeing clients at alternate times, g) involving other agencies and providers in the delivery of services, h) utilizing an interagency team, and I) utilizing non-categorical dollars. These t-tests (assuming equal variances) illustrated that interagency team members were significantly more likely than non-team members to: a) identify the basic living needs of clients ($t = -3.053$, $p < .01$), b) identify strengths and needs of the family rather than *only* the target client ($t = -3.478$, $p < .01$), and c) involve other agencies in the implementation of the service plan ($t = -2.09$, $p < .05$) (see Table 7 for subgroup means on each of the outcome indices). No other significant group differences were found between team members and non-team members. These t-tests provide further detail regarding the specific family-centered practices team members engage in when compared with non-team members. Taken together, these findings illustrate that team members are implementing some of the indices of the family-centered approach more than non-team members.

Insert Table 7 about here

Examining the Moderating Relationship of Interagency Team Membership. The second avenue of impact of interagency team membership suggested that team membership would moderate the relationship between attitude and behavior. Specifically, Hypothesis 4b suggested that membership on an interagency team would moderate the relationship of providers' adoption between positive attitudes toward the family-centered model and their adoption of family-centered practice.

Because of the complexity of introducing a moderator to a path analysis (Schmitt, personal communication), before including this moderator in the overall model the presence of the proposed moderator was first tested utilizing a hierarchical regression analysis. This analysis utilized standard hierarchical regression, and included two blocks. The first block included provider attitude toward the family-centered model and interagency team membership. The second block included the interaction term of these two variables (attitude x team membership). This analysis revealed that being a member of an interagency team was significantly related to the adoption of family-centered practices ($t = 2.82$, $p < .01$). Provider attitude was also significantly related to the adoption of family-centered practices ($t = 2.34$, $p < .05$). However, this analysis indicated that their was no significant interaction between interagency team membership and attitude impacting the implementation of family-centered practices ($t = .741$, $p = .46$). This finding indicates that team membership does not moderate the relationship between

attitude and behavior, but does have a direct effect on behavior as evidenced earlier. Overall, interagency team members appear to be more adopting of the family-centered model. This indicates that it is not the interaction of attitude and team membership that influences the adoption of family-centered practices, but the additive effect of both interagency team membership and provider's attitude toward the family-centered model. Given that the interaction term was not significant in the regression analyses the original conceptual model was revised by removing interagency team membership as a moderator, and maintaining only its direct effect. It is important to note that given that structural equation modeling corrects for measurement error (i.e., unreliability in the data) there is a small chance that an insignificant path in regression could be significant in structural equation modeling. This concern is very minimal here given that the interaction term did not remotely approach significance in the regression analyses.

Testing the Fit of the Revised Conceptual Model

Insert Figure 4 about here

To test the fit of the revised conceptual model (the original conceptual model excluding the moderating impact of interagency team membership) structural equation modeling was performed (see Figure 4 for revised model with standardized path coefficients). This model was tested with the subsample of the population who fully completed the family-centered practices version of the study (N = 121). Given that pairwise deletion was utilized to generate the covariance matrix, the harmonic (weighted)

mean of the various sample sizes was utilized as the overall sample size in subsequent path analysis (N = 115).

Overall, the structural equation modeling analysis indicates that the revised model fits the data well (see Table 8 for a summary of some of the goodness of fit indices). Although the chi square almost reached significance (9.22, p = .056), the Goodness of Fit Index, which is less sensitive to sample size, indicates the model fits the data fairly well (GFI = .97). However, other fit statistics did not reach their desired values. For example, the Adjusted Goodness of Fit Index (AGFI) which adjusts the GFI to account for the degrees of freedom of a model relative to the number of variables (an index of model parsimony) did not reach .9. Given that the fit of the model still showed room for improvement the modification indices provided were considered.

Insert Table 8 about here

Suggested Modifications to the Conceptual Model

The modification indices of this structural equation model suggested two potential changes. Each option resulted in a roughly equal reduction in the chi square value. The first suggested modification was to add a path from team membership to provider attitude, and the second was to create a non-recursive model adding a path from family-centered practices to attitude (chi-square reductions 5.49, 6.55, respectively). While either of these modifications would increase the overall goodness of fit of the model, a decision was made to add the path from team membership to attitude toward the family-

centered model. Although the nonrecursive model (adding a line from behavior to attitude) poses an interesting and plausible scenario, the cross-sectional nature of this data makes causal statements equivocal. In other words, the line from behavior to attitude is implicit, and its addition to the model would be redundant. On the other hand, the line from team membership to attitude suggests a new path of influence, and was thus incorporated into the final model. A final modification to improve the overall fit of the final model was the removal of the insignificant path from tenure to provider's attitude toward the family-centered model.

The addition of the path from team membership to attitude and the removal of the insignificant path from tenure to attitude resulted in an insignificant chi-square (2.70, $p = .26$) and better overall fit indices (see Table 9 for goodness of fit statistics for the revised model and see Figure 5 for the final model). The GFI, NNFI and the AGFI all reached their desired value of .9 (.99, .90, and .93, respectively). In addition, in the final model the path from organizational environment to provider attitude toward the family-centered model reached significance (standardized coefficient = .17, $t = 1.84$, $p = .04$, one-tailed test). This finding confirms the regression analyses described earlier indicating that the more providers' perceive their organizations as providing flexibility and autonomy the more likely they are to have a positive attitude toward the family-centered model of service delivery.

Insert Table 9 and Figure 5 about here

Chapter 4

DISCUSSION

Implementation of the family-centered model requires significant deviation from the status quo on the part of service providers. While an increasing number of service delivery reform movements encompass a family-centered service delivery philosophy, too often these reforms remain marginal in the human service delivery system (Adams & Nelson, 1995). In an effort to understand how the family-centered model could be more effectively integrated into the human service delivery system, the goal of this study was to examine what factors are related to provider's implementation of family-centered practices. The findings from this study suggest some viable points of intervention for facilitating a more widespread implementation of family-centered service delivery practices. Most importantly, it appears the process of adopting family-centered practices is related to both characteristics of the individual provider and his/her environment. Thus, this study illustrates the need to attend to both the individual and his/her context when considering the introduction of the family-centered model of service delivery.

Focusing on the combination of factors that lead to the implementation of the family-centered model is essential given that previous research has suggested that while providers may endorse this model, family-centered practices are not evident in their actual service delivery behavior (e.g., Mahoney et al., 1989; Mahoney & O'Sullivan,

1990). First, the more that providers have a positive attitude toward the model - believing this model will have positive consequences for clients, their organizations, and themselves - the more likely they are to be implementing family-centered practices. In addition, providers working in the context of an interagency team are more likely than non-team members to be implementing family-centered practices.

This study also highlights both individual and contextual level factors which are related to provider's attitude toward the family-centered model. Given the positive relationship between attitude and practice, the predictors of attitude are an important component of the adoption process. When considering the adoption of a positive *attitude* toward the family-centered model, providers' professional training backgrounds, the flexibility and autonomy they perceive in the environments in which they work, and their membership on an interagency team impact their attitude toward the family-centered model. Taken together, these findings illustrate that when attempting to facilitate the implementation of the family-centered model, an ecological approach attending to both the individual and their environment is essential.

Factors Influencing Provider Implementation of Family-Centered Practices

Provider's Attitude and Behavior

While there is a history of controversy regarding the relationship between attitude and behavior (e.g., Greenwald, 1989; Wicker, 1969), the innovation literature suggests individuals must believe in the efficacy, feasibility and desirability of a proposed change as a precursor to implementing this change (Armenakis et al., 1993; Rogers, 1995). The findings in the present study provide some support for this theory although no definitive

causal attributions can be made.

The more positive a provider's attitude is toward the family-centered model the more likely they are to be implementing the tenets of the model in their service delivery practice. This finding reveals another important point of intervention in the continued diffusion of this model. While training in the family-centered model must include information regarding the mechanics of the model, providers should also be informed about the efficacy of the model, and the beneficial consequences of the model. In other words, special effort should be made to impact staff attitude about this change, to demonstrate to staff what kind of outcomes this innovation delivers, and to provide tangible examples of the feasibility of this change. One obvious way to do this is to provide increased opportunities not only for training, but for team membership. This is especially true given that team membership not only fosters positive attitudes toward the family-centered model, but also the implementation of practices consistent with the family-centered model.

It is important to note that while this finding illustrates that there is a relationship between attitude and behavior this does not refute findings by other researchers (e.g., Mahoney et al., 1989; Mahoney & O'Sullivan, 1990) that suggest that child-centered and professional-centered service delivery is predominant in the human service delivery system. When considering the link between attitude and behavior it is critical to note that there is still a great deal of variability in providers' implementation of the family-centered model. Very few individuals in this sample identified any strengths or needs on a family level, or any basic living needs, community/natural support network needs, or

promotional skill building needs on the individual *or* family level. The relationship between attitude and behavior here simply suggests the more positively providers view the consequences of this model, the more likely they are to be putting the tenets of the model into practice. Further, the finding that provider's attitude toward the family-centered model is positively related to providers' adoption of family-centered practices punctuates the importance of attending to the factors that influence attitude in the process of adoption (i.e., professional training background, perception of flexibility and autonomy in the organizational environment, and interagency team membership).

Individual Predictors of Provider Attitude Toward the Family-Centered Model

Two important individual characteristics of service providers were explored in relationship to provider's attitude toward the family-centered model: Provider's professional training background and provider's tenure in his/her human service agency. Professional training background was related to provider's attitude toward the family-centered model, while provider's tenure in his/her organization was not.

Professional Training Background and Attitude. This study provides further evidence that providers' training backgrounds influence their attitudes toward the family-centered model. Specifically, this study found that nurses and social workers are more likely to believe that the family-centered model has positive consequences for themselves, their clients, and their agencies when compared to the other professionals and paraprofessionals represented in this sample (e.g., teachers, psychologists). In addition, post hoc comparisons indicate of all professional training subgroups, social workers are more likely to have positive attitudes toward the family-centered model while

psychologists are less likely to have positive attitudes toward the family-centered model. These subgroup comparisons must be interpreted with caution given that subgroup sample sizes were very small. There does appear to be variability in attitude across subgroups, yet these comparisons should be considered trends and require more investigation.

While the findings from the present study indicate there is relationship between professional training background and attitude toward the family-centered model, future research should address *how* this impact occurs. There are a few plausible explanations that warrant further investigation. The first potential explanation suggests that individuals whose professional training has provided them with skills to work with families have a more positive attitude toward the family-centered model (Bailey, Buysse, Edmonson et al., 1992). Bailey et al. (1991) found that nurses and social workers had the most training in working with families. Further, providers' self-ratings of skill in working with families were related to the degree to which they valued roles that involved working with families (Bailey, Buysse, Edmonson et al., 1992). It seems individuals who have been trained to focus on families are more likely to feel comfortable working with families and are more likely to value this work than individuals who have not had this training. For individuals who have received little preparation in working with families and meeting the multiple needs of families, incorporating the family-centered model may pose a more significant challenge. If providers perceive the demands of the family-centered model as beyond their realm of expertise they may have less positive feelings about the consequences of the model in general.

A second explanation suggests that providers' training backgrounds vary ideologically, and may contrast the underlying philosophy of family-centered intervention. For example, psychology has traditionally focused on an individual level of intervention, and often adheres closely to an expert, medical model of diagnosis and treatment (Levine & Perkins, 1987; Rappaport, 1977; Roberts & Magrab, 1991). Tyler et al. (1983) point out the inherent paradox for psychologists in the helping profession: the helping relationship often involves the psychologist as expert and the client as dependent while the goal of the helping relationship is to foster independence in the client. This incongruity would be especially evident in implementing the family-centered model which challenges such professionally-centered service delivery. In some instances providers may feel the family-centered model of service delivery requires activities that are inconsistent with the philosophical underpinnings of their discipline, and may have less positive attitudes toward the family-centered model.

A third explanation involves provider's current role (i.e., their organizational role or position) where norms for practices are reinforced. Provider's current role may account for variability in attitude across professional training backgrounds. For example, in some hospitals social workers often make home visits and generally have contact with other community agencies and clients' natural support networks. These activities may be a part of their current role responsibilities as "case managers" and parallel some of the tenets of family-centered intervention. In these same institutions doctors and psychologists are less likely to engage in these behaviors and more likely to adhere to a medical model of intervention. These behaviors are likely to be consistent with the

expectations of their work setting. However, the family-centered model challenges narrowly defined roles by suggesting that any point of entry into human service delivery should result in a comprehensive cooperative plan for services when necessary. Thus, in addition to providers' training backgrounds, the expectations of their current role may impact their attitude toward the family-centered model. Current role could not be examined in this study, but warrants attention in future research of how professional training impacts providers' attitudes toward the family-centered model.

When diffusing the family-centered model, practitioners and policy makers should consider the professional training backgrounds of the targeted providers. These findings suggest that when providers have had training in social work or nursing they may perceive the tenets of the family-centered model to be more consistent with their current practices. Subsequently, they may be more willing to transition to this model of service delivery than providers who have been trained in more traditional, professional centered models or who have not had adequate training in working with families. One vehicle for facilitating the acceptance and adoption of this model by more professionals may be family-centered training programs sensitive to providers' previous training experiences. In addition to teaching providers the mechanics of the family-centered model, family-centered training programs should focus on the guiding principles and the underlying philosophy of family-centered programming and how it deviates from the underlying philosophy of more traditional service models (e.g., medical model).

Attending to professional role/training becomes increasingly important as the tenets of the family-centered model are requested of a diversity of service providers.

Movements to "seamless" service delivery (i.e., where consumers can receive services in a coordinated fashion from multiple agencies and move easily between them), including wraparound service delivery and similar approaches that encompass the principles of family-centered service delivery, are becoming more prevalent, and are increasingly demanded by federal, state and local government and private funders (Adams, & Nelson, 1995; Flint, 1993). Thus, providers from a diversity of service domains are being asked to incorporate this approach to service delivery for a variety of reasons (e.g., child abuse prevention, family-preservation). While the family-centered models calls for interagency cooperation and recognizes that providers have different strengths, the provider who represents the family's point of entry to the human service delivery system must be skilled enough to partner with the family in the discovery of strengths and needs and the development of a team that may be able to address these needs. Still, while professional training background should be addressed when diffusing the family-centered model, attention to this component of the process of adoption should not occur in lieu of attention to the context in which providers are asked to implement this model.

Provider Tenure and Attitude. In this study, providers' tenure in their organizations was not significantly related to their attitude toward the family-centered model. There is some empirical evidence that individuals who have been in public service for a longer period of time may not expect change in the system (e.g., Golembiewski, 1985) and that tenure is often negatively related to attitudes toward change initiatives (e.g., Foster-Fishman & Keys, 1997). However, in this study tenure was not related to providers' attitudes toward the family-centered model. It seems that in

this study the environment that one works with, and his/her professional training background are relatively more important than how long an individual has been working in his/her organization.

It is important to note, however, that this variable did not look at tenure in human services in general, just tenure in one's current position. Therefore, tenure as operationalized in this study may not accurately reflect providers' *overall* experience with human service, but their experience with only the service organization in which they were currently employed. This distinction is important because while individuals may have a great deal of experience in human services in general they may have only been with their current organization for a short time. Previous research on tenure has found that provider's overall experience in human service delivery may make them more likely to defend the status quo than to embrace new approaches to service delivery (Foster-Fishman & Keys, 1997). Therefore, tenure as measured in this study can not provide a true picture of overall tenure in the human service delivery system and requires further investigation. Future research should examine the relationship between providers' overall tenure in human service delivery and their attitudes toward the family-centered model.

Contextual Factors Influencing Provider Attitude Toward the Family-Centered Model

While the family-centered model calls for a changes in the service delivery practices of providers, perhaps more importantly this model requires concurrent changes in the human service delivery system. Many external constraints can create barriers to provider's successful implementation of this model (e.g., Cameron & Vanderwoerd, 1997). For example, many organizations and their funders require a diagnosis for

reimbursement for the delivery of services. This policy can act as a barrier to the implementation of strengths-based service delivery and forces a deficit orientation. Therefore, a provider's context must support the implementation of the family-centered model if the diffusion of this model is to be successful. This study found that both providers' perceptions of flexibility and autonomy in their home organization, and their membership on an interagency team impacted their attitude toward the family-centered model.

Organizational Environment and Provider Attitude. When providers view their organizations as providing autonomy and flexible policies regarding when and where clients/families can be seen they are more likely to have a positive attitude toward the family-centered model. This finding supports Schneider, Brief and Guzzo's (1996) assertion that staff attitudes are impacted by aspects of the environment that they can describe including practices and procedures. The impact of the organizational environment on attitude toward the family-centered model is important because one can change aspects of the ecology (e.g., flexible rules regarding where and when clients can be seen), while individual characteristics (e.g., professional training background) are not as easily altered.

The work environment is essential to attend to given that family-centered service delivery requires practices that deviate from traditional service norms (Cohen & Lavach, 1995). These deviations include seeing clients in home and community settings, seeing clients outside of the traditional business day, providing clients with an increased voice in the direction of service delivery, and addressing the broad based needs of clients rather

than generating only diagnosis and treatment plans (Cohen & Lavach, 1995; Dunst et al., 1991). The constraints of providers' work environments can seriously inhibit their ability to incorporate families into the service delivery process in new ways (Adams & Nelson, 1995; Cameron & Venderwoerd, 1997). For example, some organizations require the identification of a diagnosis for reimbursement purposes. Others may limit the number of hours providers can spend in interagency meeting activities, or may restrict when and where providers can see clients.

Reflecting on the barriers in the child welfare system to incorporating supportive services for families, Cameron and Venderwoerd (1997) suggest that changes are needed in agency structures, methods of payment, and standard work methods. If organizational leaders or policy makers wish to see a shift to supportive, family-centered interventions, they must attend to the environment in which provider's work. In general, this means creating policies and practice norms that reinforce the implementation of family-centered practices, including flexibility in policies and practices, and autonomy for providers in the way they work with families. These potential changes include addressing policies regarding when and where clients can be seen, challenging traditional funding requirements (e.g., requiring a diagnosis for reimbursement), and altering restrictive definitions of what constitutes legitimate use of a provider's work hours (e.g., hours counseling versus hours meeting with an interagency team).

Without the freedom to see clients and families in new ways providers are unlikely to view the family-centered model as feasible or desirable, a necessary precursor in the adoption of an organizational change (Armenakis et al., 1993). Again, the

importance of context is evident; simply training providers in the mechanics of this model without providing them a context where these changes can occur is not likely to result in a meaningful change in attitudes.

The Importance of Interagency Team Membership

Another important element of context is a provider's membership on an interagency team. Interagency teams are a central component of family-centered service delivery (Hendrickson, & Omer, 1995; Rounds, 1991), and are becoming increasingly popular in a variety of service delivery domains. This study found that providers who were members of an interagency team were more likely to have a positive attitude toward the family-centered model, and more likely to be implementing family-centered service delivery behaviors. While this study is the first to examine the influence of team membership on adoption of the family-centered model other research has established the importance of alternate social settings in the adoption of innovative interventions (e.g., Kelly, Ryan, Altman, & Stlezner, in press). Kelly et al. (in press) define social settings as places "for participants to share experiences, develop a personal affiliation, and develop a sense of community" (p. 13). Involvement in an interagency team provides such a setting outside of a provider's organizational setting. While a provider's organizational context may vary in its support of the family-centered model, the interagency team provides an alternate setting where positive attitudes toward the consequences of the family-centered model and family-centered service delivery practices are more consistently fostered.

Interagency Team Membership and Provider Behavior. The results from this study suggest that being a member of an interagency team is positively related to

providers' adoption of family-centered practices. This finding illustrates the importance of the interagency team setting in facilitating the adoption of practices which significantly challenge the status quo of service delivery. While the findings from this study merely indicate that team membership is related to implementing family-centered practices, participant observation of one team provides additional insights for future research regarding *how* team membership may influence providers' implementation of family-centered practices.

First, the interagency team setting may provide a set of norms that supersede the norms and expectations of a provider's home organization or of their own professional training background. Kelly et al. (in press) suggest that social settings are thought to be instrumental in establishing "cultural values, social norms, and the rules of conduct that govern the social system" (p. 13). In the interagency team setting implementing the tenets of the family-centered model is a stated goal. Therefore, perhaps the norms and expectations for behavior are consistent with the mandates of family-centered service delivery (e.g., the inclusion of the family in the service delivery process, consumer-driven intervention). This process is evident in team meetings when individuals with more experience in this model consistently model both attitude and behavior for others, and support others with gentle reminders about the vision of the team: acknowledging the capabilities of families to actively engage in the service delivery process, endorsing the efficacy of the model, allowing families to direct the service delivery process and focusing on strengths rather than deficits.

Second, the team seems to offer a setting outside of providers' organizations

where providers may develop a sense of shared responsibility (Nelson & Allen, 1995) and camaraderie with other providers. Kelly et al. (in press) suggest that social settings can function as a source of social support for participants while they learn new skills. This was evident in the participant observation of one team. For example, at a team meeting a provider described the steps she took at her home organization to challenge the way a family was being treated. She managed to create an alternative process for the family, and was successful in altering the way her organization was intervening with the family. After relaying her story several providers applauded her efforts. This provider stated that she could never have taken those steps without the support of the team. This illustrates one example of how being a team member led to new behavior via the social support received from fellow team members to move beyond the status quo of service delivery.

In addition to interagency teams offering social support to members, the team setting provides team members with the infrastructure to put the family-centered model into practice. Many organizations are laden with rules and regulations that make implementation of family-centered practices challenging (Cameron & Vanderwoerd, 1997). The team may provide a setting that is not bound by the same policies and practices of team members' home organizations. When team members come together in an alternate setting which has different expectations for working with families, perhaps they are more likely to incorporate the model into their service delivery practices unencumbered by the constraints of their home organization.

It is important to consider that while team membership had a direct effect on family-centered practices it did not moderate the relationship between attitude and

behavior. This indicates that providers' attitude toward the family-centered model, regardless of team membership, is positively related to providers' adoption of family-centered practices. Therefore, both team and non-team members who have a positive attitude toward the family-centered model are more likely to implement this model. This illustrates that fostering a positive attitude toward the family-centered model is critical in pursuing the diffusion of this model, but does not diminish the importance of context given that team members were most likely to employ family-centered practices. It is also important to note that the moderating relationship may not have emerged due to the way the outcome variable was measured. Perhaps if provider's service delivery behavior was directly observed a moderating relationship would have been more evident.

Interagency Team Membership and Provider Attitude. The findings from this study also suggest that team membership is positively related to providers' attitudes toward the family-centered model. Again, while it is beyond the scope of this study to determine causality or what specific elements of team membership influence attitude, participant observation of one of the teams suggests some viable starting points for future research.

First, families are an active part of these team meetings. Foster-Fishman, Rodriguez and Davidson (under review) found that policy makers involved in a collaborative effort with family members of people with disabilities were influenced by the personal stories that families shared. Policy makers reported that these stories impacted their thinking about policy for individuals with disabilities. Providers' attitudes toward family-centered service delivery may be influenced in a similar fashion by hearing

families tell their own stories in an empowering setting. This may influence the value providers place on a central tenet of this model of intervention: to give families a meaningful voice in the service delivery process.

In addition, as team members, providers have the opportunity to see the family-centered model put into action outside of the constraints of organizational policies and practices. In the context of the team the model has lead to successful outcomes with families. It follows that the positive consequences of family-centered service delivery are likely to be more salient to providers who are team members than those who are not. Viewing the success of the model is also likely to impact providers' belief in the feasibility and desirability of this model. Further, Hage and Aiken (1966) suggest that professionals who were involved in "extra-organizational" activities (activities that involved professionals outside of their own organization) were more aware of the developments within their profession. This awareness may lead to a positive attitude toward family-centered practices as team members may remain on the cutting edge of what is occurring in human service. These potential explanations of the impact of team membership on provider attitude toward the family-centered model (e.g., hearing families tell their stories in an empowering setting, viewing successful outcomes of the intervention) should be considered starting points for future investigation of *how* team membership impacts attitude.

In summary, the findings regarding team membership illustrate two potential avenues of influence of providers' adoption of family-centered practices: First, provider's team involvement may directly impact the degree to which they implement the

family-centered model. Second, team membership may influence providers' attitudes toward the family-centered model which in turn impact their service delivery practices. For example, the team may provide an opportunity for service delivery staff to see the family-centered model put into action successfully leading them to perceive the model as beneficial to families. Armenakis et al. (1993) suggest that viewing the desirability and feasibility of an organizational change is central to fostering the implementation of this change. The more that providers recognize that the family-centered model is feasible and is beneficial to clients/families the more likely they may be to adopt the tenets of the model in their personal practice.

These findings are particularly important in light of increased attempts to utilize models of service delivery that embody a family-centered philosophy (e.g., the Wraparound Process). The present study provides evidence for a particular setting (i.e., the interagency team) that leads to a better implementation of family-centered services which have been shown to lead to improved client outcomes (e.g., Bradley, 1983; Marcenko, 1992; Trivette, Dunst, & Hamby, 1996; Scannapieco, 1994; Weiss & Jacobs, 1988; Weissbourd & Kagan, 1989). Providers need more opportunity to be involved directly with these types of initiatives if the goal is widespread diffusion of this empowering model of service delivery.

Limitations

It is important to acknowledge the limitations of this study. First, in this study it is impossible to determine how providers worked with families prior to their interagency team involvement. It may be that providers who become members of interagency teams

are already more family-centered in their practice and self-select into a team with this stated purpose. It should be noted, however, that providers are often assigned to the interagency teams, and do necessarily volunteer to become members. This may counter the potential bias of self-selection onto the team. In addition, no data was collected to ascertain provider's inservice training in this model which could be a confounding variable. It could be that individuals who are members of an interagency team take advantage of more training opportunities. However, training opportunities offered in the County were open to all service providers.

Another limitation of this study is that the measurement of adoption is self-reported by providers. This measure does ask providers to describe certain aspects of their practice, but there is still a threat of self-report bias. It could be that team members are more aware of the ideology of the family-centered model and what is politically correct to say. Still, in observing team meetings there was consistent evidence of transformation regarding how families were approached by providers.

Fourth, a part of the provider/family interaction outcome measure did not take into account variability across clients regarding the presence of a natural support network. This part of the measure asks if the family is included in goal setting, and if the natural support system has been included in the implementation of services, but does not ask if this network or family exists in the first place. This study assumes that if no family involvement is indicated, the family was available, but excluded in the service delivery process. In one case a provider indicated that there was no natural support network, and this question was then coded as not applicable. However, there is no way to know if this

same situation existed in other cases.

Finally, this data was collected at one point in time making the interpretation of causal relationships impossible in this study. Future efforts should involve longitudinal research so that causal relationships can be more adequately examined.

Conclusion

Given the growing evidence that the family-centered model is beneficial to clients and families (e.g., Scannapieco, 1994; Trivette, Dunst, & Hamby, 1996) ongoing service delivery reform efforts are likely to continue. In attempting to impact provider attitude, a precursor to the adoption of an innovation (Rogers, 1995), and ultimately providers' service delivery behavior, these reform efforts must not only build the capacity of the individual provider, but provide the context for this capacity to emerge. When attempting to impact attitude this includes attending to providers' professional training backgrounds, their perception of their organizational environment, and their interagency team involvement. When attempting to impact providers' service delivery behavior, this includes attending to providers' attitudes about the consequences of shifting to this model of service delivery, and providers' opportunities to be involved in interagency teams that aspire to provide services consistent with the family-centered model. To insure the widespread diffusion of this empowering model of service delivery (Trivette, Dunst, & Hamby, 1996) changes must occur on all levels of human service delivery including front line service providers, the settings in which they work, and the policies and practices that can act as barriers to their implementation of the family-centered model of service delivery.

Table 1

Professional Training Subgroups with Sample Size (N = 121)

Professional Training	N	Valid Percent
Social Work	29	26.6%
Nursing	15	13.8%
Psychology	9	8.3%
Education	14	12.9%
Law	2	1.8%
Occupational Therapy	4	3.7%
Other Professional	3	2.7%
Paraprofessional	27	26.7%
Information not available	14	11.6%

Table 2

Descriptive Statistics for Components of Family-Centered Outcome Measure (N = 121)

Variable Description	Mean	Standard Deviation	Minimum	Maximum
# of Strengths	3.6	1.7	0	8
# of Basic Living Needs	1.03	1.21	0	4
# of Community/Natural Support Network Needs	.54	.93	0	6
# of Promotional Skill Building Needs	.31	.66	0	4
# of Strengths and Needs Transcending Individual Level	1.13	1.9	0	15
# Goals	2.69	1.44	0	8
% of Goals Including Client or Family	.71	.37	0	1

Table 3

Correlation Matrix for Components of the Family-Centered Outcome Measure (N = 121)

Variable	FNS	S	BN	CNN	PSN	FCG	G	D
Family Needs/Strengths (FNS)	1.00							
Strength (S)	.342**	1.00						
Basic Need (BN)	.254**	.182*	1.00					
Community/Network Need (CNN)	.450**	.286**	.109	1.00				
Promotional Skill Need (PSN)	.161	.316**	-.013	.274*	1.00			
% Family/Client in Goals (FCG)	.046	.200*	.085	.040	.129	1.00		
Goals (G)	.290*	.416**	.344**	.211*	.215*	.333**	1.00	
Deficits (D)	-.139	-.014	-.211*	-.217*	-.092	-.006	.078	1.00

* Correlation is significant at the $p < .05$ level (2-tailed)
** Correlation is significant at the $p < .01$ level (2-tailed)

Table 4

Descriptive Statistics for Continuous* Manifest Variables in Conceptual Model

Variable Description	Mean	SD	Range
Perception of Organizational Environment	4.32	1.05	1.32 - 6
Attitude Toward the Family-Centered Model**	2.00	1.53	-3.13 - 5
Family-Centered Outcome Measure***	0	4.31	-9.94 - 19.39

* Professional Training, Team Membership were both dichotomously scored. Tenure was categorical representing increasing time intervals.
** This score is the difference between the positive attitude factor and the negative attitude factor.
*** Components of this outcome measure were standardized scores.

Table 5

Correlation Matrix for Manifest Variable in Conceptual Model (N = 121)

Variable	Attitude	Team	Training	Org.	Tenure	Practice
Attitude	1.00	-	-	-	-	-
Team	.241**	1.00	-	-	-	-
Training	.237*	.240*	1.00	-	-	-
Organization	.113	-.182	-.064	1.00	-	-
Tenure	-.040	.013	-.066	-.112	1.00	-
F-C Practice	.269**	.304**	.050	-.143	-.058	1.00

* Correlation is significant at the $p < .05$ level (2-tailed)
** Correlation is significant at the $p < .01$ level (2-tailed)

Table 6

Attitude Means and Standard Deviations by Professional Training Background (N=121)

Professional Training	N	Mean	SD
Social Work	29	2.63	1.34
Nursing	15	2.36	1.26
Psychology	9	.77	1.91
Education	9	2.32	1.63
Special Education	5	2.54	.67
Law	2	.70	1.18
Occupational Therapy	4	2.08	.97
Paraprofessional	27	2.04	1.28

Table 7

Descriptive Statistics by Subgroup (Team Member/Non Team Member) for Family-Centered Outcome Indices

Variable Description	Membership	N	Mean	SD
Including Natural Support Network***	Team	25	.96	.54
	Non-Team	85	.66	.48
Including Other Agencies in the Service Plan**	Team	26	.92	.27
	Non-Team	85	.73	.45
Identifying Basic Living Needs***	Team	28	1.64	1.39
	Non-Team	89	.85	1.12
Identifying Community/Natural Support Needs*	Team	28	.86	1.33
	Non-Team	89	.46	.77
Identifying Family Strengths and Needs***	Team	28	2.21	3.18
	Non-Team	89	.83	1.14

* **$p < .01$
** $p < .05$
*$p < .10$ (trend)

Table 8

Goodness of Fit Statistics for Revised Model (see Figure 4)

Goodness of Fit Statistics	Value
Chi-Square (with 4 degrees of freedom)	9.2 ($p = .056$)
Root Mean Square Residual (RMR)	.20
Goodness of Fit Index (GFI)	.97
Adjusted Goodness of Fit Index (AGFI)	.87
Normed Fit Index (NFI)	.80
Non-Normed Fit Index (NNFI)	.38

Table 9

Goodness of Fit Indices for Final Model (see Figure 5)

Goodness of Fit Statistics	Value
Chi-Square (with 2 degrees of freedom)	2.7 (p = .26)
Root Mean Square Residual (RMR)	.14
Goodness of Fit Index (GFI)	.99
Adjusted Goodness of Fit Index (AGFI)	.93
Normed Fit Index (NFI)	.94
Non-Normed Fit Index (NNFI)	.90

Figure 1: Conceptual Model

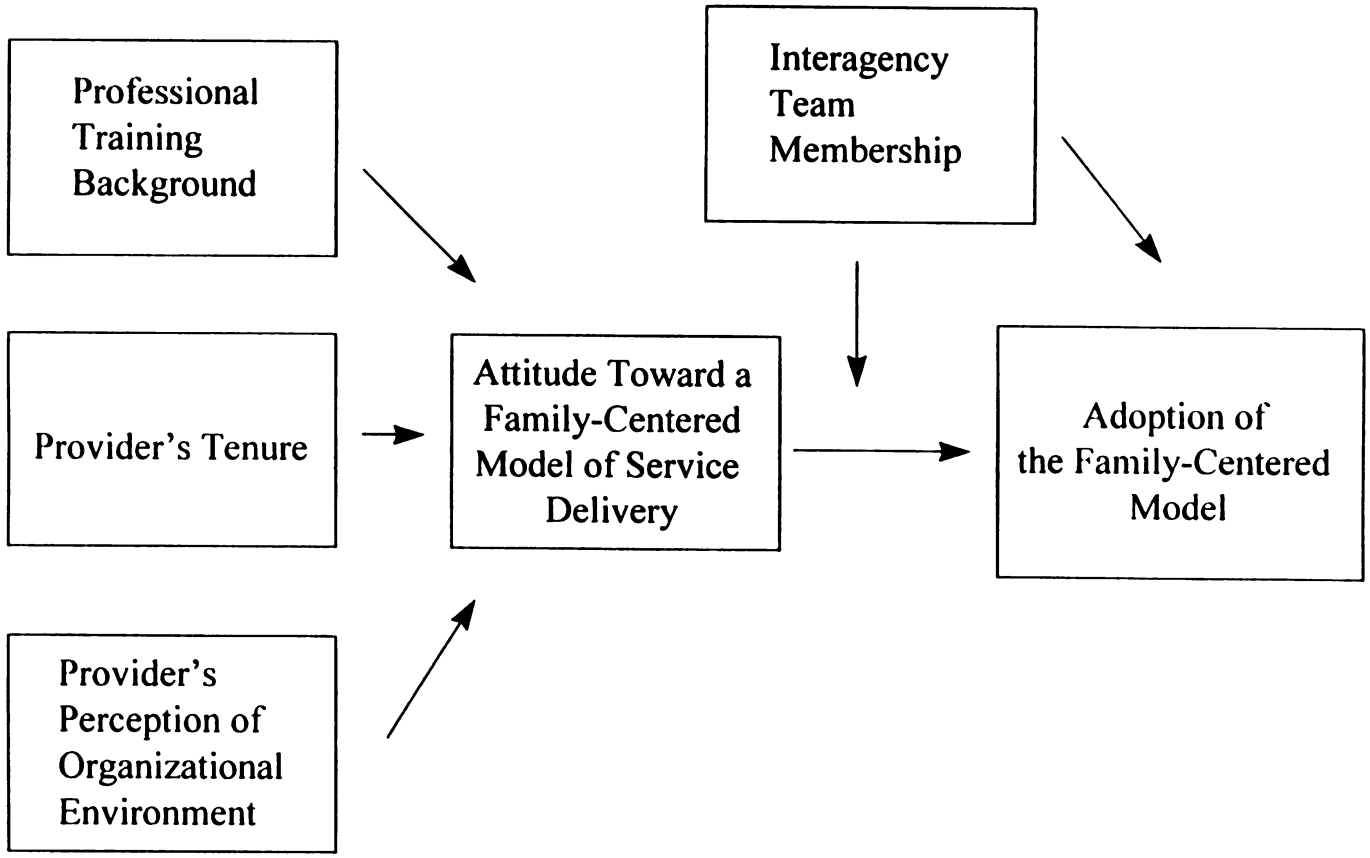
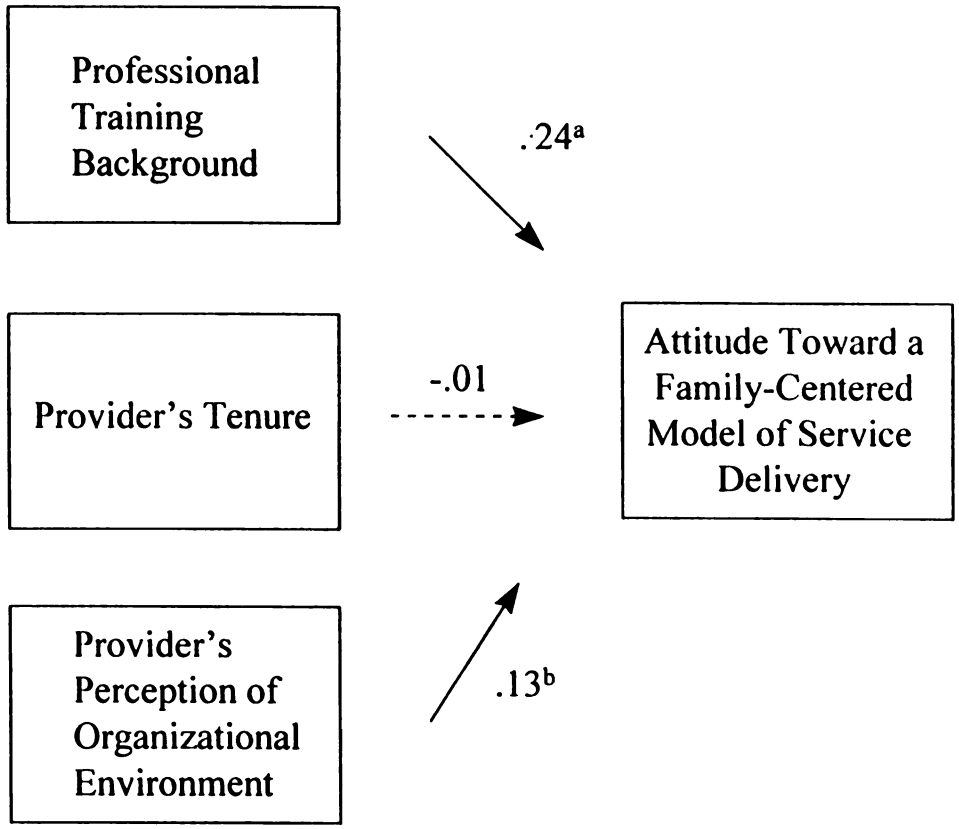


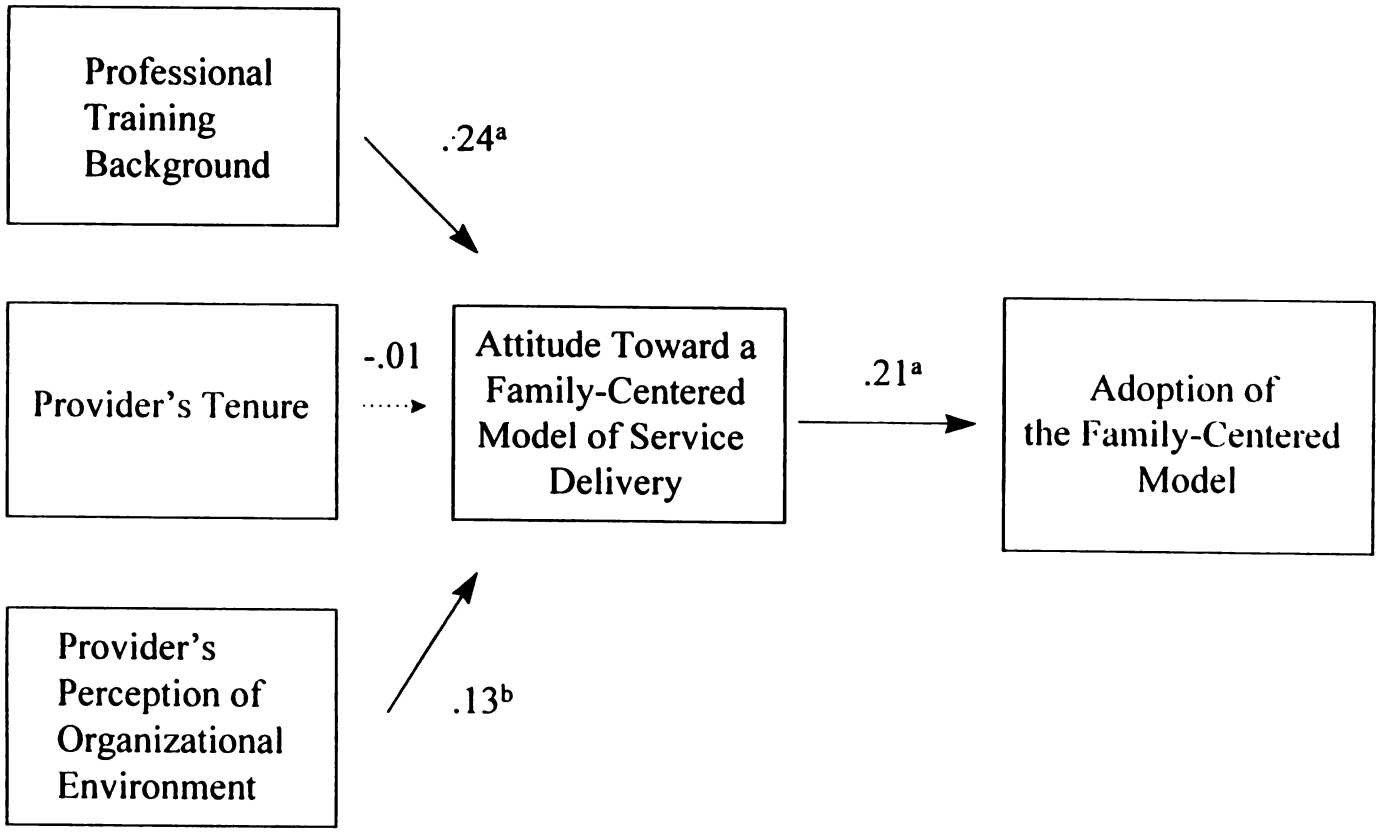
Figure 2: Predictors of Provider Attitude



[a]p-value < .05
[b]p-value = .08, one-tailed test

..... = path not significant

Figure 3: Adding the Path from Attitude to Behavior

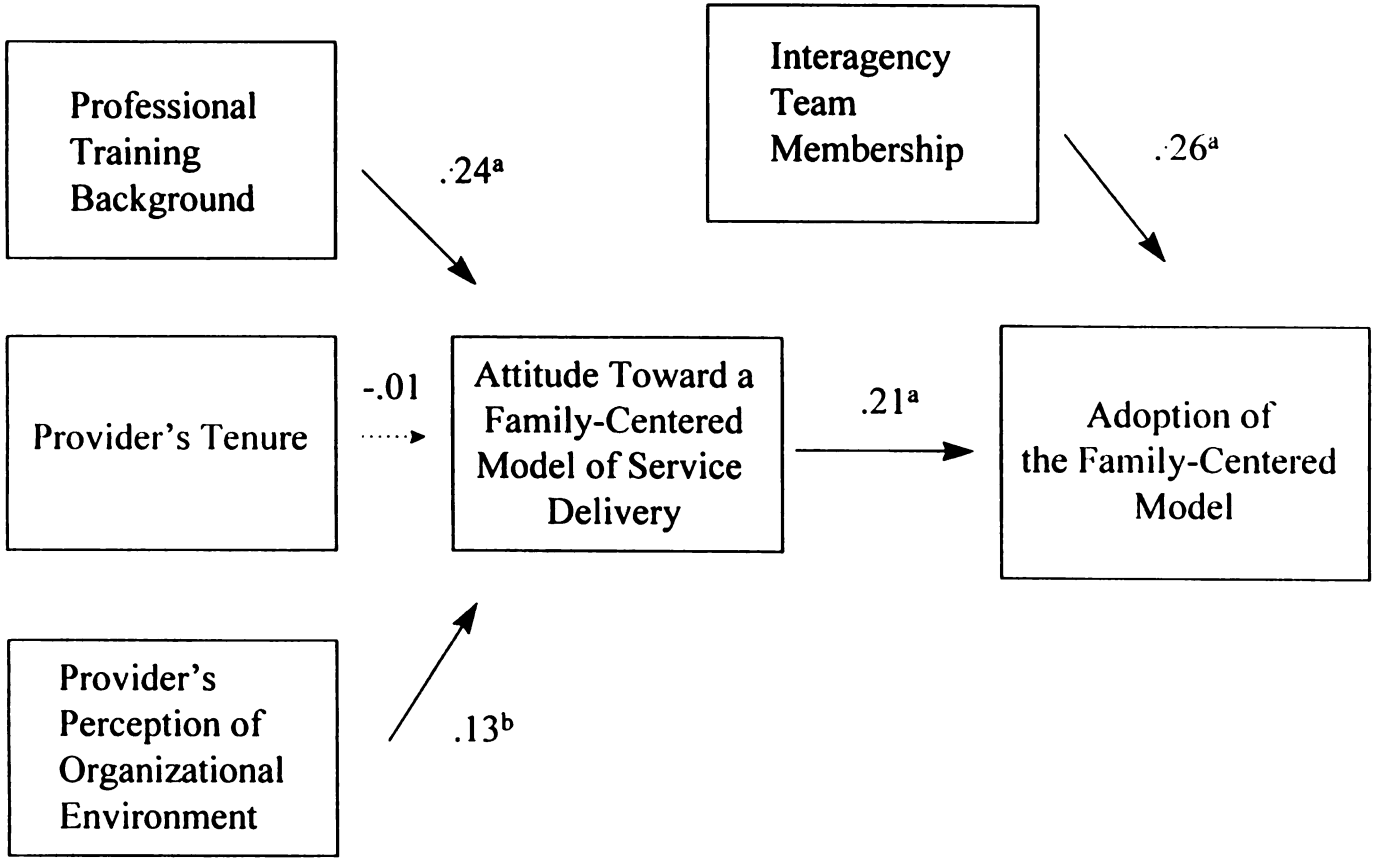


[a]p-value < .05

[b]p-value = .08, one-tailed test

..... = path not significant

Figure 4: Revised Model with Stadarized Path Coefficients

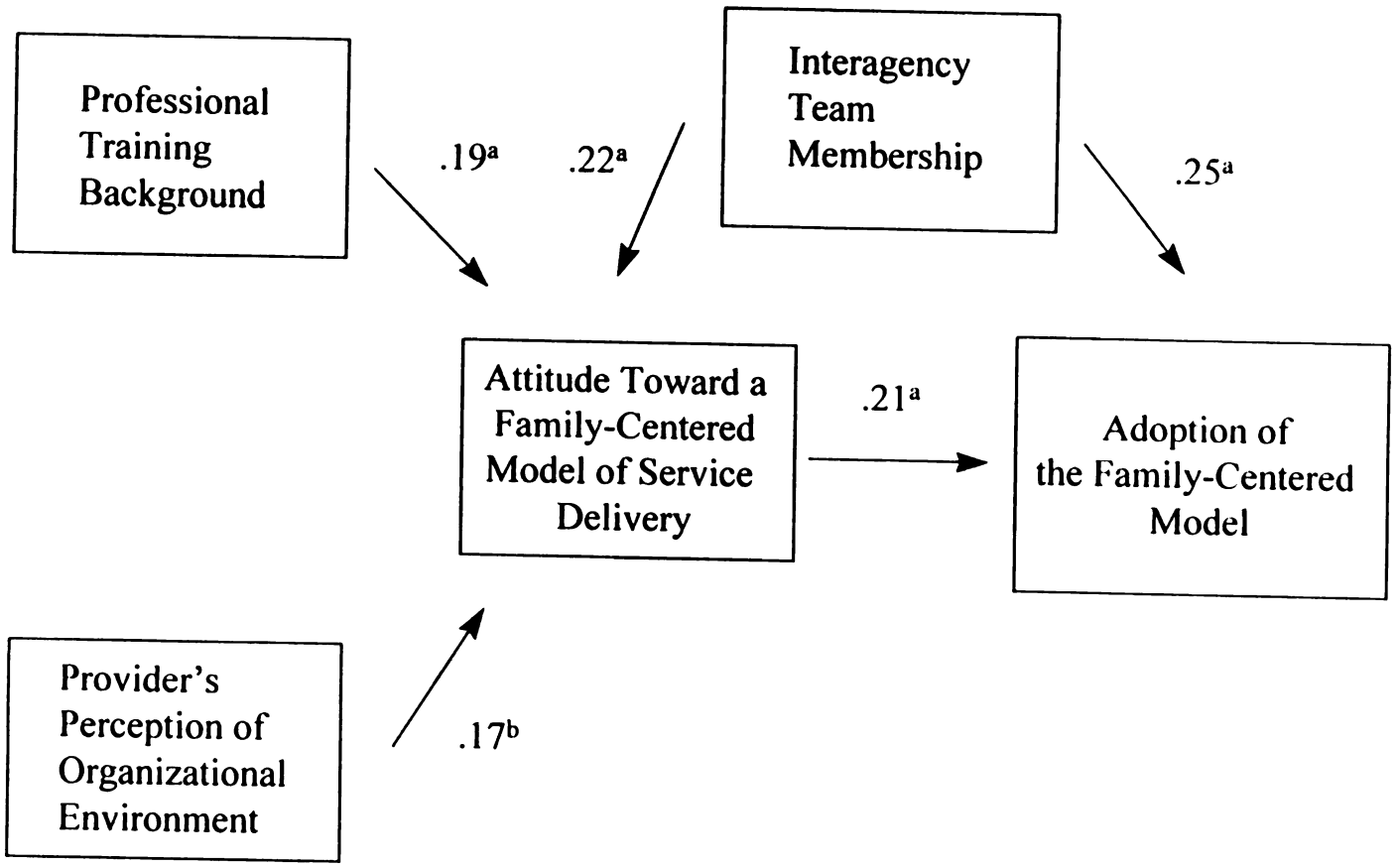


[a]p-value < .05

[b]p-value = .08, one-tailed test

..... = path not significant

Figure 5: Final Model with Stadarized Path Coefficients



[a]p-value < .05
[b]p-value = .04, one-tailed test

..... = path not significant

LIST OF REFERENCES

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Adams, P. & Nelson, K. (1995). Reinventing Human Services: Community- and Family-Centered Practice. New York: Aldine de Gruyter.

Andrews, M. A. & Andrews, J. R. (1993). Family-centered techniques: Integrating enablement into the IFSP process. Journal of Childhood Communication Disorders, 15 (1), 41-46.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. Human Relations, 46 (6), 681-703.

Bailey, D. B., Buyess, V., Edmondson, R., & Smith, T. M. (1992). Creating family-centered service in early intervention: Perceptions of professionals in four states. Exceptional Children, 58 (4), 298-309.

Bailey, D. B., Buysse, V., Smith, T., & Elam, J. (1992). The effects and perceptions of family involvement in program decisions about family-centered practices. Evaluation and Program Planning, 15, 23-32.

Bailey, D. B., Palsha, S. A., & Simeonsson, R. J. (1991). Professional skills, concerns, and perceived importance of work with families in early intervention. Exceptional Children, 58 (2), 156-165.

Bailey, D. B., Simeonsson, R. J., Yoder, D.E., & Huntington, G. S. (1990). Preparing professionals to service infants and toddlers with handicaps and their families: An integrative analysis across eight disciplines. Exceptional Children, 57, 26-35.

Ban, C. (1995). How do public managers manage? San Francisco, Ca: Jossey Bass.

Bandura, A. (1977). Social Learning Theory. Englewood Cliff, New Jersey: Prentice-Hall.

Bartunek, J. M., & Moch, M. K. (1987). First-order, second-order, and third-order change and organizational development interventions: A cognitive approach. Journal of Applied Behavioral Science, 23, 483-500.

Bradley, C. F. (1983). An evaluation of family-centered maternity care. Women and Health, 8 (1), 35-47.

Brassard, M. R., & Gelardo, M. S. (1987). Psychological maltreatment: The unifying construct in child abuse and neglect. School Psychology Review, 16 (2), 127-136.

Brewer, E. J., McPherson, M., Magrab, P. R., & Hutchins, V. L. (1989). Family-centered, community-based, coordinated care for children with special health care needs. Pediatrics, 83, 1055-1060.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. Developmental Psychology, 22 (6), 732-742.

Brown, W., Pearl, L. F., & Carrasco, N. (1991). Evolving models of family-centered service in neonatal intensive care. CHC, 20 (1), 50-55.

Cameron, G., & Vanderwoerd, J. (1997). Protection Children and Supporting Families: Promising Programs and Organizational Realities. New York: Aldin De Gruyter.

Cleary, P. (1981). Problems of internal consistency and scaling in life event schedules. Journal of Psychometric Research, 25 (4), 309 - 320.

Cohen, R. & Lavach, C. (1995). Strengthening partnerships between families and service providers. In P. Adams & K. Nelson (Eds.), Reinventing Human Services: Community and Family-Centered Practice, (pp. 261 - 277). New York: Aldin De Gruyter.

Deal, A. G., Dunst, C. J., & Trivette, C. M. (1989). A flexible and functional approach to developing individualized family support plans. Infants and Young Children, 1 (4), 32-43.

Dunst, C. J. (1985). Rethinking early intervention. Analysis and Intervention in Developmental Disabilities, 5, 165-201.

Dunst, C. J., Johanson, C., & Trivette, C. (1991). Family-oriented early intervention policies and practices: Family-centered or not. Exceptional Children, 58 (2),115-126.

Dunst, C. J., & Trivette, C. (1987). Enabling and empowering families: Conceptual and intervention issues. School Psychology Review, 16 (4), 443-456.

Dym, B. (1988). Ecological perspectives on change in families. In H. G. Weiss and F. H. Jacobs, Evaluating Family Programs. (pp. 477-495). New York: Aldine De Gruyter.

Flint, S. (1993). Family-centered child welfare services: A national overview of jurisdictions that have adopted a systemic family centered approach. Prepared for the Vermont Department of Social and Rehabilitation Services. New England Association of Child Welfare Commissioners and Directors.

Foster-Fishman, P. (1994). The influence of organizational culture on the adoption and implementation of an empowerment philosophy. University of Illinois at Chicago. Unpublished dissertation.

Foster-Fishman, P., & Keys, C. B. (1997). The person/environment dynamics of employee empowerment: An organizational culture analysis. American Journal of Community Psychology, 25 (3), 345-370.

Foster-Fishman, P., Rodriguez, C. U., & Davidson, W. S. II. (1997). Shaping the policy making process in the developmental disabilities field: Multiple players and their effective strategies. Manuscript submitted for publication.

Foster-Fishman, P., Salem, D., Allen, N. E., & Fahrbach, K. (1997). Creating a viable ecology for human service delivery reform. Manuscript submitted for publication.

Friesen, B. J., & Koroloff, N. M. (1990). Family-centered service: Implications for mental health administrators and researchers. Journal of Mental Health Administration, 17 (1), 13-25.

Fullan, M. (1982). The Meaning of Education Change. New York: Teachers College Press.

Fuller, E. F. (1969). Concerns of teaching: A developmental conceptualization. American Educational Research Journal, 6 (2), 207-226.

Garbarino, J. (1988). The human ecology of early risk. In S. J. Meisels and J. P. Shonknoff, Handbook of early childhood intervention. (pp. 78-96). Cambridge: Cambridge University Press.

Garshelis, J. A. (1993). Comparisons of family needs assessed by mothers, individuals, professional and interdisciplinary teams. Journal of Early Intervention, 17 (1), 36-49.

Golembiewski, R. T. (1985). Humanizing Public Organizations. Mt. Airy, MD: Lomond.

Greewald, A. G. (1989). Why are attitudes important? In A. R. Partkanis, S. J. G. Breckler, & A. G. Greewald (Eds.), Attitude Structure and Function. Hillsdale, NJ: Erlbaum.

Hage, J. & Aiken, H. (1966). Program change and organizational properties a comparative analysis. The American Journal of Sociology, 503-519.

Hendrickson, J. M., & Omer, D. (1995). School-based comprehensive services: An example of interagency collaboration. In P. Adams & K. Nelson (Eds.), Reinventing Human Services: Community and Family-Centered Practice, (pp. 145 - 162). New York: Aldin De Gruyter.

Humphry, R. (1995). Families who live in chronic poverty: Meeting the challenge of family-centered services. The American Journal of Occupational Therapy, 49, 687-693.

Humphry, R. & Geissinger, S. (1993). Issues in early intervention: Measuring attitudes about family-centered services. Occupational Therapy Journal of Research, 13 (3), 147-162.

Johnson, B. H., McGonigel, M. J., & Kaufman, R. K. (Eds.) (1989). Guidelines and recommended practices for the individualized family service plan. Washington, D.C.: Association for the Care of Children's Health and NEC*TAS.

Kaiser, A. P., & Hemmeter, M. L. (1989). Value based approaches to family intervention. Topics in Early Children Special Education, 8, 72-86.

Kelly, J. G., Ryan, A. M., Altman, B. E., & Stelzner, S. P. (in press). Understanding and changing social systems. In J. Rappaport & E. Seidman (Eds.) Handbook of community psychology. New York, NY: Plenum.

Krehbiel, R., Munsick-Bruno, G., & Lowe, J. (1991). NICU Infants born at developmental risk and the individualized family service plan/process (IFSP). CHC, 20 (1), 26-33.

Levine, M. & Perkins, D. V. (1987). Principles of Community Psychology. New York: Oxford University Press. Chapters 3 and 4.

Louis, M. R. (1981). A cultural perspective on organizations: the need for and consequences of viewing organizations as culture-bearing milieux. Human Systems Management, 2 246-258.

MacBeth, G. (1993). Collaboration can be elusive: Virginia's experience in developing an interagency system of care. Administration & Policy in Mental Health, 20(4), 259-282.

MacFarquhar, K.W. (1983). Individualizing services of seriously emotionally disturbed youth: A nationwide survey. Administration & Policy in Mental Health, 20 (3), 165-174.

Mahoney, G., & O'Sullivan, P. (1990). Early intervention practices with families of children with handicaps. Mental Retardation, 28, 169-176.

Mahoney, G., O'Sullivan, P., & Fors, S. (1989). The family practices of service providers of young handicapped children. Infant Mental Health Journal, 10 (2), 75-83.

Marcenko, M. O., & Smith, L. K. (1992). The impact of a family-centered case management approach. Social Work in Health Care, 17(4), 87-100.

McBride, S. L., Brotherson, M. J., Joanning, H., Whiddon, D., & Demmitt, A. (1993). Implementation of family-centered service: Perceptions of families and professionals. Journal of Early Intervention, 17 (4), 414-430.

Meyer, M. E. (1996). The effects of weak ties on perceived organizational innovativeness and innovation characteristics. Michigan State University. Unpublished dissertation.

Nelson, K. & Allen, M. (1995). Family-centered social services: Moving toward system change. In P. Adams & K. Nelson (Eds.), Reinventing Human Services: Community and Family-Centered Practice, (pp. 109-125). New York: Aldin De Gruyter.

Nelson, K. E., Landsman, M. J., & Deutelbaum, W. (1990). Three models of family-centered placement prevention services. Child Welfare, 69, 3-21.

Numinen, V. J., Haas. D. L., Yaroch, L., & Fralick, P. (1992). Building community-based service systems for children with special needs: The Michigan locally based service program. Issues in Comprehensive Pediatric Nursing, 15, 17-37.

Paavola, J.C. (1996). Interdisciplinary school practice: Implications of the service integration movement for psychologists. Professional Psychology: Research and Practice, 27 (1), 34-40.

Pandianni, J. A., & Maynard, A. G. (1993). Vermont's local interagency teams: An evaluation of service coordination and system change. Community Alternatives: International Journal of Family Care, 5 (1), 85-97.

Pecora, P. J., Delewski, C. H., Booth, C., Haapala, D., & Kinney, J. (1985). Home-based family-centered services: The impact of training on worker attitude. Child Welfare, 64 (5), 529-540.

Pelton, L. H. (1992). A functional approach to reorganizing family and child welfare interventions. Children and Youth Services Review, 14 289-303.

Pizzo, P. (1990). Family-centered head start for infants and toddlers: A renewed direction for project head start. Young Children, 45, 30-35.

Rappaport, J. (1977). Community Psychology: Values, Research, and Action. New York: Holt, Rinhart and Winston. Chapter 1.

Roberts, R. N. (1991). Psychologists' role in a family-centered approach to practice, training, and research with young children. American Psychologist, 46 (2), 144-148.

Rogers, E. (1995). Diffusion of Innovation. 4th Edition. New York: Free Press.

Rounds, K. A. (1991). Early intervention services for very young children and their families under P.L. 99-457. Child and Adolescent Social Work, 8(6), 489-499.

Roush, J., Harrison, M., & Palsha, S. (1991). Family-centered early intervention: The perceptions of professionals. American Annals of the Deaf, 136 (4), 360-366.

Sagie, A. & Koslowsky, M. (1996). Decision type, organizational control, and acceptance of change: An integrative approach to participative decision making. Applied Psychology, 45 (1), 85-92.

Scannapieco, M. (1994). Home-based service program: Effectiveness with at risk families. Children and Youth Services, 16 (5-6), 363-377.

Schneider, B., Brief, A. P., & Guzzo, R. A. (1996). Creating a climate and culture for sustainable organizational change. Organizational Dynamics, , 7-19.

Senge, P. M. (1990). The fifth discipline: The art & practice of the learning organization. New York: Doubleday.

Skaff, L. F. (1988). Child maltreatment coordinating committees for effective service delivery. Child Welfare, 68 (3), 217-230.

Trivette, C., Dunst, C., & Hamby, D. (1996) Characteristics and consequences of help-giving practices in contrasting human service programs. American Journal of Community Psychology, 24 (2), 273-293.

Tyler, F. B., Pargament, K. I., & Gatz, M. (1983). The resource collaborator role. American Psychologist, 38(4), 388-398.

Weiss, H., & Jacobs, F. (Eds.). (1988). Evaluating family support programs. Hawthorne, NJ: Aldine de Gruyter.

Weissbourd, B. (1990). Family resource and support programs: Changes and challenges in human services. Prevention in Human Services, 9 (1), 69-85.

Weissbourd, B., & Kagan, S. L. (1989). Family support programs: Catalysts for change. American Journal of Orthopsychiatry, 59, 20-31.

Weisz, J. R., Han, S. S., & Valeri, S. M. (1997). More of what? Issues raised by the Fort Bragg study. American Psychologist, 52 (5), 541-545.

Westby, C. E., & Ford, V. (1993). The role of team culture in assessment and intervention. Journal of Educational and Psychological Consultation, 4 (4), 319-341.

Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. Journal of Applied Social Psychology, 16, 387-409.

APPENDICES

APPENDIX A

Survey Instrument

APPENDIX A

Survey Instrument

SECTION A: BACKGROUND DATA

A1. **AGE**
(1) □ under 20
(2) □ 20 to 29
(3) □ 30 to 39
(4) □ 40 to 49
(5) □ 50 to 59
(6) □ 60 or over

A2. **GENDER**
(1) □ female
(2) □ male

A3. **ETHNIC BACKGROUND**
(1) □ Asian
(2) □ Black
(3) □ Hispanic
(4) □ White/Caucasian
(5) □ Native American
(6) □ other _____

A4. **EDUCATION**
(1) □ some high school
(2) □ high school degree
(3) □ some technical school
(4) □ technical degree
(5) □ some college
(6) □ college degree
(7) □ some graduate work
(8) □ graduate degree

A5. **ORGANIZATIONAL LEVEL**
(1) □ direct care provider
(2) □ supervisor
(3) □ middle management
(4) □ other _____

A6. **YEARS WITH ORGANIZATION**
(1) □ less than 6 months
(2) □ 6 months to 1 year
(3) □ 1 to 2 years
(4) □ 2 to 4 years
(5) □ 4 to 6 years
(6) □ 6 to 10 years
(7) □ 10 to 15 years
(8) □ more than 15 years

SECTION C: LAST CLIENT

We are interested in learning about how you actually deliver services on a day to day basis. Please answer the following questions about the last client with whom you met to develop specific goals and objectives. You will probably need to refer to your client's file in order to answer the following questions. Please select your last client who was not in an immediate crisis.

C1. Please provide the following information about your client

(A) Age _____ (B) Gender: (1) M (2) F

© Race/Ethnicity:

(1) African American
(2) Latino
(3) Asian
(4) Native American
(5) Caucasian
(6) Other _____

How long have you been seeing this client? _____months

C2. (A) Please list all of the client's strengths.

(1)_____ (4)_____
(2)_____ (5)_____
(3)_____ (6)_____

C3. (A) Please list all of the client's needs.

(1)_____ (4)_____
(2)_____ (5)_____
(3)_____ (6)_____

C4. Please list all of the goals that were developed for this client. For each goal please indicate who identified that goal.

GOAL	WHO IDENTIFIED IT (check all that apply)		
	ME	CLIENT	FAMILY/FRIEND
(A)_____	___	_____	_____
(B)_____	___	_____	_____
(C)_____	___	_____	_____
(D)_____	___	_____	_____

C5.(A) Did you include people from your client's natural support system in identifying or implementing the above goals or objectives? (1)YES (2)NO

C6.(A) Did you talk to providers in other agencies in order to develop or implement the above goals or objectives? (1)YES (2)NO

C7.(A) Do the above goals or objectives involve utilizing services that are provided by other agencies in Calhoun County? (1)YES (2)NO

C8.(A) Have you attempted to access non-categorical funds (flexible funds not linked to specific programs) for any of your clients? (1) YES (2) NO

C9.(A) Have you referred any of your clients to a multi-disciplinary team?
(1) YES (2) NO

C10.(A) What percentage of your meetings with clients took place in their homes or other community settings (e.g., school, work site)? _____%

C11.(A) What percentage of your meetings with clients took place during the evenings (after 6 pm) or on the weekends? _____%

SECTION D: CURRENT INITIATIVES

1	2	3	4
Not at all involved	**Somewhat involved with service delivery or planning**	**Involved in service delivery or planning**	**Very involved with service delivery or planning**

	Column I	**Column II**
Initiative		**Extent of Involvement**
D1. Babies and Families Resource Team (formerly Lamplighter Project)		
D2. Calhoun County Health Improvement Program (CCHIP)		
D3. Calhoun County Human Service Coordinating Council (HSCC)		
D4. Calhoun County Human Service Coordinating Council Workgroups		
D5. Communities in Schools/Great By 8		
D6. Early On		
D7. Family Services Coordinating Committee (Resource Team)		
D8. Michigan Interagency Family Preservation Initiative (MIFPI)		
D9. Open Door Initiative		
D10. Partners for Drug-Free Communities		
D11. Strong Families/Safe Children (SF/SC) (e.g., Baby Families Resource Team, Kinship Caregiver Group)		
D12. Other (specify):		

SECTION E: CURRENT OPERATIONS

In my organization.....		Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
E1.	Management values staff input in decision-making	1	2	3	4	5	6
E2.	Staff do not collaborate or share information with each other	1	2	3	4	5	6
E3.	Employees have significant autonomy in determining how they do their jobs	1	2	3	4	5	6
E4.	Employees resist change	1	2	3	4	5	6
E5.	Employees do not have a voice in decision-making	1	2	3	4	5	6
E6.	Policies allow for flexibility in where services are delivered (e.g., evening or weekend work is possible)	1	2	3	4	5	6
E7.	Policies allow for flexible work schedules (e.g., evening or weekend work is possible)	1	2	3	4	5	6
E8.	Management is open to change in how services are provided	1	2	3	4	5	6
E9.	Management trusts employees to get the job done	1	2	3	4	5	6
E10.	Staff work together to solve problems and improve client services	1	2	3	4	5	6
E11.	Management supports and encourages collaboration with service providers from other agencies	1	2	3	4	5	6
E12.	Employees have little flexibility in how they work with the clients on their caseloads	1	2	3	4	5	6

SECTION H: IMPACTS OF A STRENGTHS-BASED MODEL

This strengths based approach will:		Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
H1.	result in improved client outcomes	1	2	3	4	5	6
H2.	be overly time consuming	1	2	3	4	5	6
H3.	increase my clients' ability to independently access services in the future	1	2	3	4	5	6
H4.	require me to work with clients in a way that is inconsistent with my training	1	2	3	4	5	6
H5.	improve my relationships with my clients	1	2	3	4	5	6
H6.	undermine my professional expertise	1	2	3	4	5	6
H7.	confuse the roles of clients and providers	1	2	3	4	5	6
H8.	improve the exchange of information between me and my clients	1	2	3	4	5	6
H9.	require clients to take on too much responsibility for their own care	1	2	3	4	5	6
H10.	increase the likelihood that clients receive the services they want	1	2	3	4	5	6
H11.	be compatible with how my organization currently operates	1	2	3	4	5	6
H12.	confuse accountability issues	1	2	3	4	5	6

Will this emphasis on a strengths-based approach have any other impacts? Please describe.

APPENDIX B

Coding Sheet for Family-Centered Outcome Measure:

Coding Needs

APPENDIX B

Coding Sheet for Family-Centered Outcome Measure:

Coding Needs

Kinds of Needs	Individual Level		Family/natural support Network Level		Total Target	Total Family
Basic Living						
Community Support/ Resources (WIC, CMH, natural support networks, legal supports)						
Promotion Skill Building (Knowledge, Awareness, Skill, Opportunity)						
Compensatory Skill Building (addressing skill in certain area that is currently lacking --e.g., conflict resolution skills)						
Treatment (medical, counseling, assessment)						
Deficits (enter only those items that one does not need e.g., depression)						

APPENDIX C

Coding Sheet for Family-Centered Outcome Measure:

Coding Strengths and Goals

APPENDIX C

Coding Sheet for Family-Centered Outcome Measure:

Coding Strengths and Goals

Strengths			Goals	
Indi	Fam	Comm	Indi	Fam
1.				
2.				
3.				
4.				
5.				
6.				
stntoti	stntotf	stntotc	gototi	gototf

Directions:
Write each strength/goal in its own row in the appropriate column.
Count the number of strengths/goals in each column, and record
the total for each column in the last box of the column.

Coding Notes: (please make note of anything unusual, confusing, etc.)