

Native American family systems : applications of the circumplex model of families
by Amy L Griffith

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Science in Health and Human Development
Montana State University
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Abstract:
The Circumplex Model of Families (Olson, Russell, & Sprenkle, 1989) has been used extensively with populations including Anglo-American, European-American, and Mexican-American families. However, there appears to be no research in the literature assessing the use of the Circumplex Model with Native American families. In the current study, FACES II (Olson, Bell, & Fortner, 1995) was used to assess levels of cohesion and adaptability, as well as family typology, according to the Circumplex Model with a sample of women residing on the Sioux-Assiniboine Fort Peck reservation in Poplar, Montana. The data were compared with the normative, baseline data for the Circumplex Model (Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1983) using chi square tests for difference. Results indicated no statistically significant differences on the dimension of cohesion or on family typology outcome. Significant differences were found on the dimension of adaptability, specifically in outcome scores for the category of rigid. This study indicates the need to assess cohesion and adaptability among Native American populations, especially related to individual perceptions of cohesion and adaptability and levels of functioning. Further research is recommended to expand the sample beyond female members of families, include measures of acculturation, and assess perceptions of individual items on FACES II.

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ABSTRACT

The Circumplex Model of Families (Olson, Russell, & Sprenkle, 1989) has been used extensively with populations including Anglo-American, European-American, and Mexican-American families. However, there appears to be no research in the literature assessing the use of the Circumplex Model with Native American families. In the current study, FACES II (Olson, Bell, & Portner, 1995) was used to assess levels of cohesion and adaptability, as well as family typology, according to the Circumplex Model with a sample of women residing on the Sioux-Assiniboine Fort Peck reservation in Poplar, Montana. The data were compared with the normative, baseline data for the Circumplex Model (Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1983) using chi square tests for difference. Results indicated no statistically significant differences on the dimension of cohesion or on family typology outcome. Significant differences were found on the dimension of adaptability, specifically in outcome scores for the category of rigid. This study indicates the need to assess cohesion and adaptability among Native American populations, especially related to individual perceptions of cohesion and adaptability and levels of functioning. Further research is recommended to expand the sample beyond female members of families, include measures of acculturation, and assess perceptions of individual items on FACES II.

CHAPTER 1

INTRODUCTION

Family therapists often approach theoretical change in families from a perspective involving communication and structure within the system (Haley, 1963; Lewis & Ho, 1975; Beavers, 1977; cited in Olson, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1983). When conceptualizing about families, diagnostic tools can be utilized to assess the level of functioning within a systemic framework. A well-studied and validated model for conceptualizing family functioning is the Circumplex Model of Families (Olson et al., 1983). This model has gained wide-spread acceptance in the field of family therapy.

The Circumplex Model is used to assess family functioning according to the dimensions of cohesion and adaptability, with communication as a facilitative dimension. As a classification system it yields three basic family typologies: Balanced, Midrange, and Extreme. According to the developers (Olson, Russell, & Sprenkle, 1989), "the ultimate purpose of the Circumplex Model is to facilitate bridging the gaps that often exist among theorists, researchers, and practitioners" (cited in Olson et al., 1983, p.47).

Statement of the Problem

A number of studies have tested the validity of the Circumplex Model for use with clinical and non-clinical families (Olson, 1993; Thomas & Olson, 1993; Anderson, 1986). Intact nuclear and extended families were studied by the developers and serve as normative

data for the Circumplex Model (Olson et al., 1983). Additional research has been conducted to assess the use of this model with ethnic and culturally diverse families (Vega, Patterson, Sallis, Nader, Atkins, & Abramson, 1986; Woehrer, 1989; Flores & Sprenkle, 1989), but these studies have not included the Native American population.

Purpose of the Study

The purpose of this study is to examine the applicability and utility of the Circumplex Model of Families with Native American family systems. It addresses the assumption that normative data can be used to generalize about people who represent a variety of cultural and ethnic backgrounds. When therapists communicate and conceptualize about families in a uniform fashion, clarity among practitioners increases. However, caution is in order when diverse families are categorized according to standard theoretical models, there is a possibility that relevance of the applicability may be lost (Draper & Marcos, 1990). Such assessments must be relevant among populations which vary according to culture, family structure, socioeconomic status and community (Dilworth-Anderson, Burton, & Turner, 1993). The lack of research related to Native Americans according to existing models of family assessment suggests the need to examine the applicability of the Circumplex Model for use with a sample of Native American parents.

Research Questions

Currently, there appears to be no published research evaluating the effectiveness of describing family types among Native American populations using the Circumplex Model of

Families. This study presents a preliminary examination of the applicability of the Circumplex Model with a sample of Sioux-Assiniboine parents in a reservation setting. Specifically this study examines whether the basic structure and typology of the Native American family (as measured by the dimensions of cohesion and adaptability) is substantially different from normative Anglo-American outcome measures. Based on the outcome measures of a sample of Native Americans according to the Circumplex Model, the appropriateness of using this model to define family typology for clinical and non-clinical purposes among Native American populations will be examined within historical, social, and cultural contexts.

Definition of Terms

Adaptability refers to the ability of members of a system to flexibly negotiate changes in structure to accommodate developmental or environmental factors (Olson et al., 1983).

Cohesion refers to the ability of a system to maintain connection and closeness among members while accommodating structural changes (Olson et al., 1983).

Communication refers to the ability of members of a system to use established means of information exchange to convey shifts in structure (Olosn et al., 1983).

Normative family refers to the baseline data compiled by the researchers of the Circumplex Model (Olson et al., 1983) to describe family typology among families.

Intact family refers to a system with two parents who are married to each other and parent their children together.

Extended family refers to a system in which several generations share the responsibilities of parenting the children, including non-biological members.

Clinical refers to individuals and families involved in counseling for the purposes of improving functioning and experiencing greater satisfaction among members.

Non-clinical refers to individuals and families not involved in counseling related to presenting difficulties in functioning or satisfaction among members.

Significance of the Study

According to Red Horse (1980), the "extended family systems that are characteristic among American Indians are often misunderstood within the human service professions" (p. 462). By not seeking to understand these families within a cultural context, counselors risk misinterpreting therapeutic signs of healthy and unhealthy functioning. For example, in many Native American extended family systems there exists a cycle of 1) being cared for by others, 2) preparing to care for others and 3) assuming care for others (Red Horse, 1980). For non-Native American therapists this may represent a lack of "healthy" differentiation within the family and can lead to potentially damaging misinterpretations of client behavior. Thus it is important to address the role of the extended family as it affects perceptions about cohesion and adaptability. This study examines Native American family systems and addresses possible cultural effects on their family typologies in relation to the Circumplex Model. This information will help therapists working with Native American clients appropriately apply the Circumplex Model in their assessment.

Assumptions and Limitations

This study is based on the assumption that families function adequately when members can flexibly adapt to developmental and situational changes. Adequate functioning requires that families maintain a sense of structure and stability as they experience inevitable internal and external stressors (Olson et al., 1983). This study also assumes that the Circumplex Model of Families generally provides an appropriate framework for classifying systems within the dimensions of cohesion and adaptability, as evidenced by considerable research supporting the use of this model for use with both clinical and non-clinical families.

The assumptions in this study related to Native American families are focused on aspects of structure and functioning that may be different than those in Anglo-American families. This study assumes that the extended kinship system of Native American families may impact their scores on measures of cohesion and adaptability that were developed according to two-parent, intact families. In addition, the unique characteristics and oppressive history of Native Americans separates this population from the dominant Anglo-American population. Finally, it is assumed that coping styles and family strengths among Native Americans will reflect cultural, historical and environmental issues, and that these factors differ from those experienced by the dominant culture. These assumptions will be the conceptual basis for explaining differences in family typology among Native American and Anglo-American samples according to the Circumplex Model of Families.

Though the small sample size of the study limits the ability to generalize about the way people of Sioux-Assiniboine heritage will measure on the model, as well as generalizations

related to the larger Native American population, the study presents a preliminary examination of the differences between the scores of a sample Sioux Assiniboine individuals and those of the normative sample. By examining these differences, practitioners gain increased awareness of the effects of ethnic differences on the assessment of family functioning. Lack of detailed demographic information also limits the integration of economic issues, marital status, education level, and cultural identity into a conceptualization about classification within the Circumplex Model. In addition, without a measure of acculturation, this study is not able to ascertain the degree to which participants see themselves as connected to traditional versus dominant culture norms. However, this study reports scores from a sample of Native American families living in a rural, reservation setting which indicates a level of geographic isolation and cultural homogeneity.

CHAPTER 2

REVIEW OF THE LITERATURE

The following review presents literature related to the study of the Circumplex Model of Families and its application to ethnically diverse families. In addition, literature describing the Native American family system, its structure, values, and sociocultural factors will also be presented. The review is divided into three parts:

1) A description of the Circumplex Model of Families and support for the use of this model to classify family types;

2) A presentation of research that assesses the application of the Circumplex Model among ethnic families;

3) A description of Native American families according to the available research.

The Circumplex Model of Families As a Measure of Family System Functioning

Olson et al. (1989) developed the Circumplex Model of Families to describe family typology within dimensions of cohesion and adaptability, indicating levels of overall familial communication. The development of this model was inspired by Hill's (1949) research on family stress and coping strategies. From Hill's research came the terms cohesion and adaptability in family systems. In addition, Hill (1949) described the interface between these concepts and familial communication as a facilitative component for movement along the lines of cohesion and adaptability.

The purpose of the Circumplex Model is to study family functioning and strengths across the life cycle in the course of "normal" (non-clinical) family development. It was developed as a means of assessing families along the dimensions of cohesion and adaptability. Olson et al. (1983) proposed that by understanding the ways non-clinical families cope with stress, and by accommodating shifts in levels of cohesion and adaptability, a description of non-clinical family strengths is facilitated. Adequate functioning in families is marked by levels of high resources, low stress, high coping skills and high reports of satisfaction (Olson et al., 1983). By understanding adequate family functioning, therapists can conceptualize and assess systemic change among clinical populations. Therefore, the clinical purpose of understanding healthy family functioning is the implementation of programs focused on helping families develop systemic strengths and coping styles that accommodate life cycle changes.

Cohesion and Family Functioning

Cohesion is defined as "the emotional bonding that family members have toward one another" (Olson et al., 1983, p. 48). It represents the degree of closeness experienced by each person in a family to other members and is expected to change somewhat over the life cycle of a family. Cohesion is measured by elements within the family including time spent together and apart, physical and emotional distance between members, type of friendships experienced and allowed outside of the family system, and the rigidity of boundaries between members and sub-systems. In the Circumplex Model cohesion is defined within a nonlinear continuum of disengaged, separated, connected and enmeshed. Optimal family functioning occurs in the

middle categories of separated and connected, while the disengaged and enmeshed categories are considered less conducive to adequate functioning.

Adaptability and Family Functioning

Adaptability is defined as "the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress" (Olson et al., 1983, p. 48). Adaptability is characterized as a family's ability to flexibly negotiate life cycle changes related to power, roles and rules within a normal developmental context. These changes occur during the development of a new family through marriage and childbirth, adolescent identity formation and differentiation from the family of origin, and the realignment of the couple after the children leave the household. In the Circumplex Model adaptability is measured as rigid, structured, flexible and chaotic. Theoretically, structured and flexible families will experience greater satisfaction, while the extreme types of rigid and chaotic families will have greater difficulty negotiating developmental changes (Olson et al., 1983).

Communication and Family Functioning

Communication between family members involves the exchange of information "within and between family systems utilizing established channels of communication" (Olson et al., 1983, p. 64). As members of the system inform each other and respond to structural changes within the system, cohesion and adaptability will shift to accommodate changes. The ability of members to communicate about shifts in cohesion and adaptability will positively affect family functioning. Communication within the family promotes systemic growth over the life

cycle and enables families to change in the areas of cohesion and adaptability. With a focus on developmental growth, positive communication is viewed as enabling change in systems, while negative communication limits healthy change. Positive communication between family members includes clear messages and congruent meanings and actions. Negative communication is marked by unclear, paradoxical messages, and by incongruent meanings and behaviors. With positive communication between members and sub-systems, families can more adequately negotiate the shifts in cohesion and adaptability that accompany developmental growth.

Classification within the Circumplex Model

The Circumplex Model uses a curvilinear framework of four levels of cohesion and four levels of adaptability, creating sixteen family types (Figure 1). The family types are defined as Balanced, with cohesion and adaptability both falling into a central area (e.g., flexibly connected); Mid-Range, with placement in one central area and one extreme area (e.g., flexibly disengaged); and Extreme, with both cohesion and adaptability in extreme areas (e.g., chaotically enmeshed). Balanced families are considered representative of non-clinical, "normal" families, and utilize positive communication and experience greater satisfaction, related to their strengths, coping strategies, and stress levels. Extreme families are likely to experience greater difficulty negotiating developmental changes, rely more on negative communication styles, and are more common among clinical families.

Figure 1
Circumplex Model of Family Systems

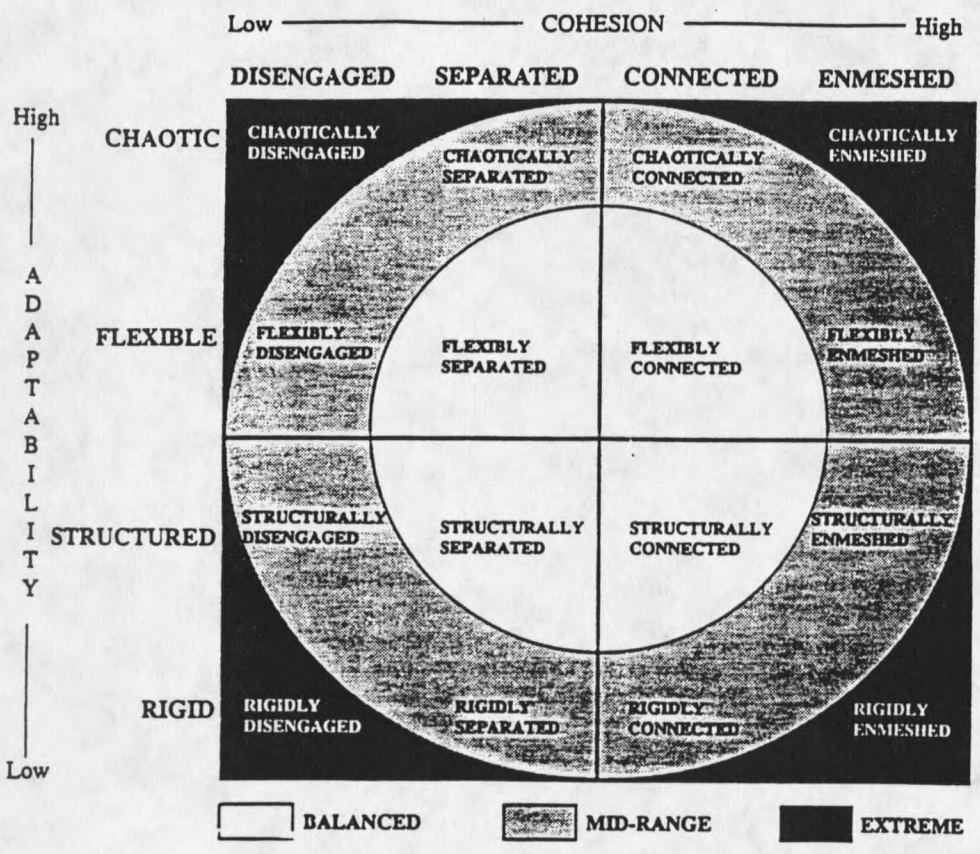


FIGURE 1. The Circumplex Model of Families
(reprinted with permission from Olson, Bell, & Portner, 1995)

The Circumplex Model and Family Functioning

By examining Balanced families, researchers attempt to understand the strengths that many clinical families lack. Families in the balanced areas of cohesion cope more effectively with stress and change by remaining connected to each other and experiencing a level of personal autonomy. Families labeled as enmeshed may experience low autonomy between members while those labeled disengaged may experience low bonding within the system. "Because of differences in cultural norms, it is possible for some families to operate at these extremes without problems" (Olson et al., 1983, p. 54). The effects of ethnicity on family functioning become less problematic when all members of the system are in agreement about the structure of roles, rules, and boundaries. This structure may become blurred as culturally diverse families experience generational differences in levels of acculturation.

The interface between the Circumplex Model and general family systems theory relies on the concepts of morphogenesis, the ability to negotiate change, and morphostasis, the inability to change (Olson et al., 1983). As family members communicate and offer positive feedback, morphogenesis facilitates systemic change throughout the life cycle. With negative communication and feedback, the system will experience a state of morphostasis and the inability to accommodate developmental changes. In normal families the system balances morphostasis and morphogenesis, allowing for closeness and continuity or adaptation and change when necessary. In clinical families problems or identified patients often serve to maintain the system as it is and preserve the current level of functioning, to the detriment of developmental changes.

Theoretical Change and the Circumplex Model

Implicit in the Circumplex Model are the concepts of first and second order change. The curvilinear nature of the model allows for therapeutic change along two dimensions (Olson, 1993). First order change describes difference within the current family system specifically related to flexibility. No shift occurs in the structure of the system according to first order change, but instead occurs within the existing systemic framework. Systemic functioning becomes problematic when there is too much or too little flexibility. Second order change relies on change in the system itself. This type of change occurs over time and is often precipitated by stress within the current system (e.g. divorce, birth). In systems with balanced levels of cohesion, change occurs to accommodate positive and negative stressors. With low levels of adaptability the system resists necessary, developmental changes and becomes unbalanced in the event of stressors. An understanding of first and second order change according to the Circumplex Model enables therapists to design interventions towards appropriate systemic processes.

Research Hypotheses Supporting the Circumplex Model

Several hypotheses were proposed by the researchers of the Circumplex Model which address issues related to cohesion, adaptability, communication, and the interface of these concepts with family functioning (Olson, 1993; Olson et al., 1983). The first three hypotheses describe the theory that Balanced families will function more adequately than Extreme families, utilizing skills and coping strategies which enable them to change more easily than extreme families. Families that function well in extreme areas tend to have agreement

between the members as to the rules, roles, and boundaries of the system. The next two hypotheses propose that Balanced families will experience more positive communication than Extreme families and that the positive communication that facilitates changes over the life span will be accomplished more easily by Balanced families than Extreme ones. Finally, the researchers hypothesize that Balanced families will experience change over the life span, while Extreme families will resist developmental change.

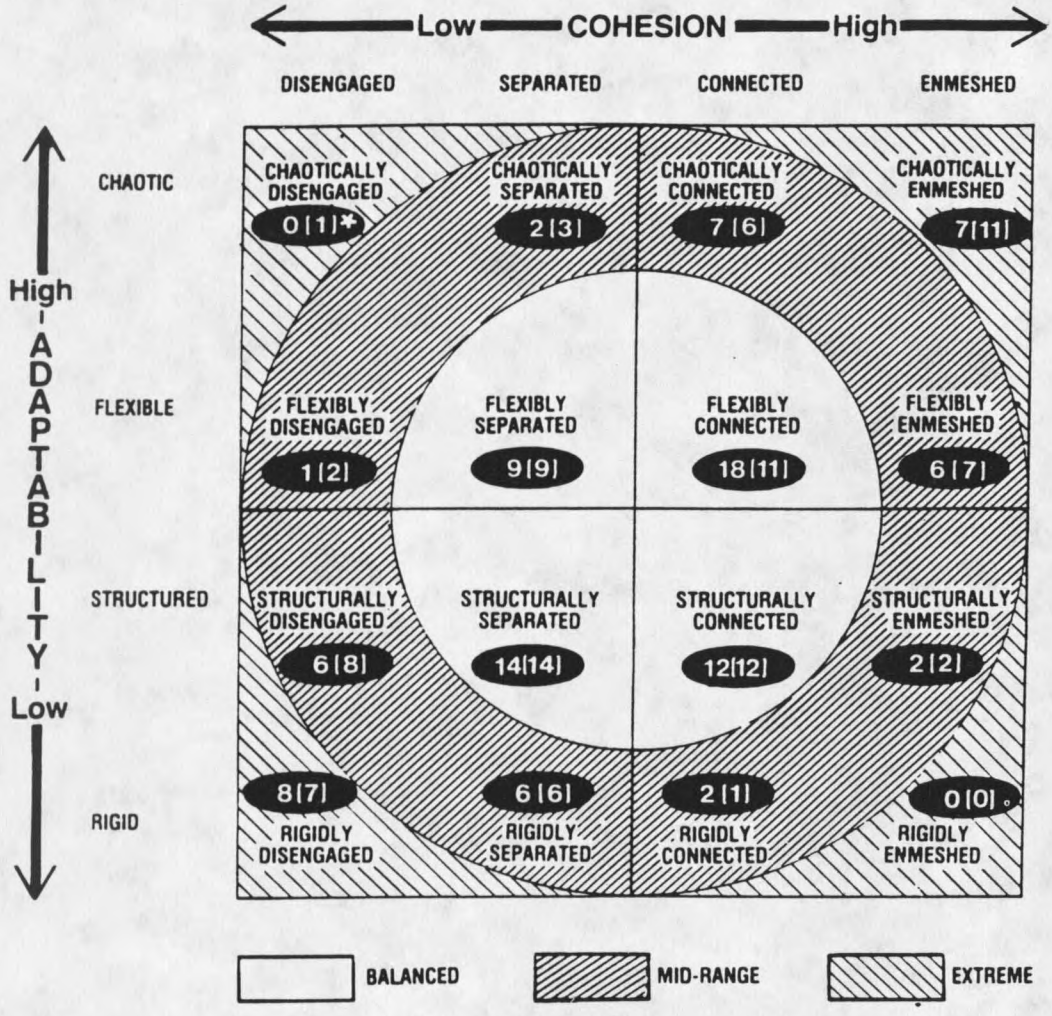
In the current study of the Circumplex Model with Native American families the researcher provides an expanded context within which culturally diverse families can be understood. Studying the Circumplex Model of Families as a classification tool with ethnic families supports the evaluation of traditional counseling paradigms according to a diverse population. By identifying the similarities and differences among Native American and Anglo-American families practitioners have access to an increased body of knowledge related to family strengths and coping styles. An expanded view of the differences and similarities among ethnically diverse families better prepares therapists to assess the issues of their clinical families in light of identified culturally specific styles and strengths. It is important to study the Native American extended family system according to the concepts of cohesion and adaptability since ethnic influences may impact individual and systemic perceptions of these concepts. By assessing Native American families according to the Circumplex Model without examining the ways they might score differently than the normative sample within the dimensions of cohesion and adaptability, therapists risk labeling pathology where there is none.

Test of the Circumplex Model of Families

The research related to use of the Circumplex Model for assessment of family functioning supports the use of this model for understanding the interface between cohesion and adaptability and the relationship between these variables and family communication. In addition, research supports the ability of this model to discriminate between clinical and non-clinical levels of family functioning.

An extensive study by Olson et al. (1983) developed normative information about the Circumplex Model using a random sample of 2,692 upper to middle-class intact families. The families represented 31 states and were predominantly European-American. Participants represented different stages of the family life-cycle, included a husband, a wife, and averaged three children. Approximately 64% represented nuclear family systems and 36% included extended family. The study captured intact families at their current developmental stage.

In the sample of non-clinical, intact families, scores were predominately Balanced (53%), with one ideal and one mid-range area on the Circumplex Model. Fifteen percent of these families scored within two of four extreme regions (Figure 2). The researchers indicated on the dimension of adaptability, 63% of the families were structured and 37% were flexible, while on the dimension of cohesion, 37% were separated, and 63% were connected (results equal more than 100% due to rounding) (Olson, 1993).



Parents: N = 2224; adolescents: N = 421.
*Adolescent percentages in parentheses.

FIGURE 2. Normative Families in the Circumplex Model
(reprinted with permission from Olson, Bell, & Portner, 1995)

The researchers attributed these percentages to the intact and non-clinical nature of the participants.

Thomas and Olson (1993) used the Clinical Rating Scale (CRS) for the Circumplex Model of Marital and Family Systems (Olson & Killoran, 1985) to test the hypothesis that non-clinical families were more balanced on the Circumplex Model than clinical families, and used more positive communication within the system. The CRS was developed to provide observational assessment of families for classification within the model. The researchers tested all members of the family systems using a self-report measure and the CRS observational instrument. The majority of the sample of 182 families were white, intact, and middle class and the sub-samples were comprised of two clinical and two non-clinical groups. The results showed a significant difference between the clinical and non-clinical samples, with no difference within sub-samples. Of the intact, non-clinical families, 85.9% scored as Balanced and 6.4% as Extreme on the Circumplex Model. Intact, clinical families scored as 20.4% Balanced and 34.1% Extreme. These results indicated the ability of the Circumplex Model to discriminate between most clinical and non-clinical families.

Examination of communication between members resulted in significant differences between groups. Clinical families demonstrated poorer communication patterns than did non-clinical families. Those with poor communication scored as Extreme to Midrange, while families with very good communication patterns scored as Balanced.

Anderson (1986) assessed the applicability of the Circumplex Model by testing the curvilinear hypothesis using alternate measures for cohesion, adaptability and communication. Specifically, the study measured emotional involvement, shared family activities and marital

consensus within families experiencing stressors related to the first child entering school. The results of Anderson's study supported the hypothesis that application of the curvilinear model to dimensions of cohesion and adaptability significantly predicted differences in communication styles. In addition, the results supported the hypothesis that Balanced families experienced more positive communication within the system than did Extreme families.

The Circumplex Model of Families consistently discriminates between adequate and poor family functioning. For counselors, this reliability permits use of the model for family assessment purposes to help determine the clinical nature of their clients. In addition, the systemic nature of the model facilitates conceptualization and change related to overall family functioning, expanding the utility of the model to include placing the presenting problem within a larger context. It is important, however, to examine how the constructs of cohesion and adaptability as measures of family functioning apply to diverse, ethnic systems.

The Circumplex Model with Ethnically Diverse Families

The literature related to assessment of culturally diverse families indicated the appropriateness of using the Circumplex Model of Families for this purpose. For accurate assessment, issues such as socioeconomic status and level of acculturation were often included. By integrating social variables and family functioning, counselors can conceptualize about systemic change with ethnically diverse families.

Vega et al. (1986) administered the Family Adaptability and Cohesion Evaluation Scales II (FACES II) (Olson, Bell & Portner, 1995) to distinguish between Mexican-American and Anglo-American families on the Circumplex Model. An acculturation measure

was applied to the Mexican-American cohort to determine each family's level of integration into the dominant culture. Acculturation was defined as a synthesis of ethnic values within the current U.S. social environment (Vega et al., 1986). There were no significant differences between groups on measures of cohesion and adaptability. Mexican-American families with both high and low levels of acculturation scored within normal ranges on cohesion and adaptability. Mean scores on cohesion were 62.8 for Anglo-Americans and 63.7 for Mexican-Americans compared to the national norm of 64.9, indicating a balanced score of connected. Mean scores for adaptability were 49.5 for Anglo-Americans and 50.4 for Mexican-Americans compared to the national norm of 49.9, indicating a balanced score of flexible. The higher scores of Extreme by Mexican-American families (24% compared to Anglo-American Extreme scores of 20%) were attributed to families of lower acculturation. These results suggested that, despite the impact of culture on cohesion and adaptability, Mexican-American families scored predominately within the range of well-functioning systems.

Flores and Sprenkle (1989) used the updated FACES III as well as a measure of acculturation to assess Mexican-American families from different economic strata. Results indicated significantly more Mexican-American families scored as Extreme (16.7%) and fewer scored as Balanced (40.0%) when compared to the national norms of Extreme (11.3%) and Balanced (48.5%) (Olson et al., 1983). The Mexican-American sample consisted of non-clinical families and was controlled for effects of acculturation. The difference in means was attributed to socioeconomic status, with more extreme Mexican-American family types comprised of families with lower income levels. The researchers noted that despite the modest differences between the scores of the Mexican-American sample and the national

norm, the overall similarities between the two groups indicated the appropriateness of using FACES for family assessment with this ethnic group. Although this study did not address the typology among Native American families, the extended family systems examined by the researchers provided information that may be useful for assessment of Native American extended families according to the Circumplex Model.

Woehrer (1989) observed and interviewed families from a variety of ethnic backgrounds and assessed them according to the dimensions of cohesion and adaptability within the Circumplex Model. The families included Americans with Irish, Italian, German, Scandinavian, Japanese, Chinese, African and Eastern European heritages. This study explained the influence of the extended family on perceptions of cohesion and adaptability and contrasted these observations with those made regarding nuclear families.

Woeher (1989) described the range of variation on measures of cohesion and adaptability when evaluating extended family systems, citing ethnic value systems and kinship networks as integral reasons for variance. Many family members in this study agreed they felt close to each other, suggesting that perceptions of cohesion among extended families is high. Enmeshment in extended family systems appeared less restrictive than in nuclear systems and offered a sense of connection with many family members. In the extended family the high level of emotional affect that occurred in enmeshed systems was diffused among many people. However, in nuclear sub-systems this characteristic often led to increased pressure on a few members.

Woehrer found that extended families experienced higher levels of enmeshment than nuclear families did and she described the ways functioning decreased when members became

emotionally cut-off from each other. Woehrer described the effects of the pressure to be emotionally connected among ethnic families that traditionally experience difficulty with affective communication. Because the structure of the extended kinship network depended upon a rigid, hierarchal system among ethnically diverse families, few extended family systems could be described as chaotic. Those that appeared chaotic often reflected a crisis in the system that necessitated the reorganization of the hierarchy before structure could be restored.

Rigidity was observed in the structure of many ethnic extended families. Members of nuclear subsystems within extended families often experienced low levels of personal autonomy and felt incapable of affecting necessary changes in the system. Among ethnic families with rigid hierarchical structures, a sense of cohesion was maintained by discussion of decisions with non-authoritarian family members. Woehrer (1989) found evidence supporting Olson's hypothesis that Extreme families within the Circumplex Model experienced less stress and negative functioning when familial expectations closely matched family structure (Olson et al., 1995).

Previous research on the use of the Circumplex Model to assess functioning among ethnically diverse populations found that ethnicity had no significant effects on the way families scored within the curvilinear dimensions of cohesion and adaptability. Overall, ethnic and extended family systems score similarly to those families used to create norms on the Circumplex Model. Nominal effects were attributed to acculturation factors, socioeconomic status, and extended family interactions.

Native American Families

The scarcity of published clinical research concerning Native Americans indicates a lack of direct attention to the many issues affecting tribes in this country. Fifty percent of Native Americans live on reservation settings (Herring, 1992) with the remaining half migrating between urban areas and the reservation. The clinical issues experienced by this population (e.g. substance abuse and unemployment) indicate a need to address specific types of problems occurring and to evaluate the efficacy of current therapeutic interventions.

> "The disrupted Native American family has resulted in Native American youth continuing to be plagued by poor testing results, suicides and drug-related deaths, negative career ideation resulting in disproportionate unemployment and underemployment, little recognition of Native American nonverbal communication styles, and family dissatisfaction trends among adolescents" (Herring, 1992, p.35).

By increasing awareness of Native American family structures, strengths and the impact of these factors on individual mental health and family functioning, therapists can begin to effectively address unique issues of rural Indians.

Research literature on counseling with Native American populations is predominantly qualitative and focuses on the cultural differences in communication and family styles between native and non-native people. In order to accurately understand Native American families according to existing therapeutic assessment models, one must consider the cultural and social factors associated with this population. With more than 200 separate tribal affiliations living in both urban and reservation settings, differences in values and cultural norms among

Native Americans makes each group distinctive in many aspects of values, culture, and practices (Red Horse, 1980; Herring, 1992; Sage, 1991; Miller, 1982). Although Native American people vary according to tribe, several intrinsic aspects of their indigenous culture (i.e., nonverbal communication, extended familial structures, unique history marked by oppression) may serve as sources for individual and group strengths. The historical, social, and cultural aspects that are somewhat homogeneous among Native Americans will be the focus of this literature review and will provide an expanded understanding of cohesion and adaptability and of Native Americans in the context of family functioning.

This study of a sample of Sioux-Assiniboine parents on the Fort Peck reservation in Montana examines the family typology represented by one group of Native Americans. Considering the cultural differences among tribal affiliations, this sample was chosen as an example of rural Native Americans residing in a reservation setting.

Native American Family System Characteristics

Traditional values shared by Native American families center around concepts of communion with nature, respect for others, and personal responsibility (Herring, 1992). These values affect the position of the family within the larger social context as members seek connection with all things around them and find satisfaction in this connection and the ability to offer respect to others. By maintaining a level of personal responsibility towards self in relation to others, individuals develop a sense of autonomy within the family system.

Most Native Americans live within an extended kinship network that includes grandparents and cousins, as well as non-family members. The extended family may share the

same house or represent several closely connected households. In the reservation setting geographic proximity and small communities provide an intrinsic sense of connection among family and social systems. Tafoya (1989) describes the family as a forum for healing and addressing problems. One way this is accomplished is by a system of "fostering" that involves children moving freely from one household to another as issues arise and are resolved. The responsibilities of parenting fall on all members of the family network, especially grandparents, in the process of rearing children.

When family members live in different states, connections are maintained and members can enter and exit extended households easily. A sense of traditional tribal mobility and the institution of the reservation systems, which separated many families, may contribute to this phenomenon (Red Horse, 1980). Within urban settings, Native Americans often imitate the reservation dynamic by developing sub-communities and preserve a sense of connection with family and social systems. When family is not available, non-kin are integrated into personal community to provide a sense of security and connection.

The value of mutual obligation between family members is a distinctive quality in Native American families (Red Horse, 1980). With an emphasis on self in relation to other, autonomy becomes imbedded in the interrelationships of the extended kinship system. Individuals attain a sense of self through personal wisdom and skill. These avenues provide a means for earning respect from others. However, individual respect depends upon factors of family loyalty and pride as well. Respect for the individual relies on the integral elements of support for culture, family, and self within a contextual system. In integrated Native American family systems members find strength and comfort in the ability to experience

independence while staying connected to the family. With an emphasis on familial bonding members can enter and exit the system with an underlying sense of attachment to the larger group.

Cohesion has been affected by the evolution of the Native American family system as a result of urbanization and cultural dilution. To describe the effects of social factors on Native American people, four categories of cultural identity have been designated in the literature (LaFramboise, Trimble, & Mohatt, 1990; Red Horse, 1980). The first category is labeled traditional and describes those who retain membership in a specific tribe, speak their native language, and ascribe to ancestral customs, values, and spiritual practices. The second category, transitional or marginal, includes those who experience many aspects of their cultural identity and may retain native language, yet struggle to combine traditional paradigms within current U.S. standards. The third type is considered assimilated into the predominant social culture and generally replaces traditional values with those of the society at large. Bicultural or pantraditional describes a balance between current U.S. social norms and traditional beliefs and customs, and indicates an ability to move easily between these diverse lifestyle paradigms.

Within traditional views of the family, Native Americans find many sources of support and models of resiliency (Johnson, 1995; LaFramboise et al., 1990). These strengths support the healthy functioning of many Native American families. The underlying construct of personal resiliency relies on the strength of the family system and kinship connections. Johnson (1995) describes several resiliency mechanisms upon which culturally diverse families often rely. The value placed on the family system provides a framework in which individual

members can cope with outside stress factors and serves as a sense of support in addressing negative life circumstances. The extended family is a symbol of strength and safety for individual members. Also, the respect offered to elders reflects the value placed on these members as role models and sources of advice. A sense of connection experienced within extended family systems provides a center for modeling and learning among members.

Two primary reinforcers for the sense of connection and safety associated with this type of kinship network are the retention of traditional language and specific spiritual customs. In this fortified family system, members find refuge from racist and intolerant beliefs often encountered in the dominant culture. With the advent of migration to urban areas and the familial divisions among previous generations incurred by forced reservation systems, staying connected to kin becomes a phenomenon in itself and reinforces the importance of family. Within the family system, individual coping styles can be supported by other members and the development and adaptation of these styles is reinforced. In the current study, the researcher suggests that experiences of Native American extended family systems deserve further exploration to determine ways cohesion and adaptability may be defined differently among Native American families.

Native American Characteristics

Although many differences exist among Native American tribes, certain attributes are generalized to the experience and values of many groups (Sutton & Broken Nose, 1996). Herring (1992) describes a Native American experience of connectedness to the natural world and all those who share in this sacred place. Because nature is sacred, humans are part of and

not in power over nature. This sense of connection within the universe is reflected in traditional customs, spiritual practices, and the mutuality between living things. Mutuality implies a sense of respect for the individual that is extended to everyone as members of this natural world. To earn and maintain this respect accorded to all, individuals seek to improve themselves and their skills, supporting the overall good of the community and the family.

Sharing, rooted in the sense of connection to others and to the universe, becomes a common avenue for nurturing relationships (Lewis & Keung Ho, 1975; Tafoya, 1989). Whether in a ceremonial context or a neighborly exchange, giving gifts and sharing among community members represents the connectedness between people and develops trust in relationships. Trust is further engendered by mutual respect between people and the importance of individual choice. Individual choice will ideally be guided by a sense of mutuality and care for others, but even in situations of selfish or poor choices the focus on respect towards the individual often supercedes criticism (Tafoya, 1989).

In conflictual situations, order and resolution are often maintained through temporary distance and limited exhibitions of negative emotions. "Many Native people are taught to very carefully monitor their anger, and not express it openly, in order to avoid harming others" (Tafoya, 1989, p. 77). The ability of family members to move freely between extended kinship households allows for resolution of problems through time and space between conflicted members. This flexibility within the connected family system provides a "healthy and variable form of child-rearing and better distributed loss" (Tafoya, 1989, p. 78).

Another aspect of Native American connectedness is evidenced in the focus on community. Especially in reservation settings, the experience of community among people

is a focal point for daily life. Among tribal groups with differing family structures (i.e., matrilineal, patrilineal) the community consistently supports the individual. The importance of the community is reflected by the relevance of role modeling by elders, group think concerning community and family issues, and systemic approaches to child care and discipline. The Native American cultural paradigm often finds regulation of behaviors supported by others and individuals may experience a heightened sense of external loci of control (Dilworth-Anderson, Burton, & Johnson, 1993).

Other characteristics may occur to different degrees among tribal groups and residential settings. The sense of people and things as imbedded in nature allows for a more expanded concept of time. The concept of time may be operationalized as a pace that supports maintaining connections with others and addressing daily issues as they are deemed necessary. This view of time is reinforced by the belief that individual life occurs within the context of an ordered universe which includes good and bad (Lewis & Keung Ho, 1975). The belief that nature connects everything provides the organic balance to achieve a positive outcome during interactions and experiences among people. Trust in this type of ordered, natural world allows Native Americans to find humor in daily life and exhibit patience in working toward natural harmony and balance. By understanding cultural, social, and familial characteristics among Native Americans (Green, 1982), as well as the value of autonomy within a cohesive extended family system, counselors are better equipped to assess clinical issues and conceptualize about growth and change within this diverse population.

Socio-Cultural Factors Affecting Native Americans

The issues facing most Native American groups today can be categorized under the umbrella of racism and oppression. Historical pressures from genocide, governmental lack of respect for tribal property rights, implementation of the reservation system, and forced assimilation into the dominant culture have had far-reaching effects on current functioning of the individual and family. This type of cultural holocaust represents an effort by the American social and political system to maintain equilibrium through the suppression of traditional customs, languages, and practices (Dilworth-Anderson, Burton, & Johnson, 1993; Tafoya & Del Vecchio, 1996).

The concrete manifestations of the oppressive treatment of Native Americans is evidenced in many ways including sexual abuse, disruption of the family system, and patronizing attempts by the dominant culture to elicit change and resolve conflict with Native American people (LaFramboise, et al., 1990). With the family and the community as cornerstones of individual health and stability, environmental interference of this paradigm (e.g. separation of families onto reservations, boarding schools, urbanization pressures) precipitated many current issues. Beginning in the 1930's, children were removed from their families by members of the dominant culture who believed the development of young children must be preserved from the assimilation of traditional ways in order to facilitate the integration of Native Americans into mainstream society (Dilworth-Anderson, Burton, & Johnson, 1993). This led to the development of boarding schools to which masses of

children were sent. These children lived away from their families and were systematically abused for speaking their native language and practicing traditional customs (Tafoya & Del Vecchio, 1996).

Cohesion within many Native American families has been negatively affected by the history of separation among members. For example, many elders suffered the loss of their children to boarding schools and foster homes and may have difficulty grand-parenting the younger generations. The adult children of boarding schools and foster homes are now learning about parenting their own children after missing the benefits of modeling from the family.

The separation of families that resulted from the practice of removal from the home, implementation of the reservation system, and urbanization efforts have affected the identity formation of many Native Americans. The interface between maintaining a sense of ethnic identity while assimilating the values of the Anglo culture has negatively impacted Native American concepts of self-esteem and tribal identity. For children who have been adopted into white families, difficulties often surface during adolescence when ethnic differences become more visible to the child (Miller, 1982). While the reservation system is responsible for the separation of families from each other, in many instances it provides a framework for maintaining connection between members of family and community. For Native Americans in urban settings, the geographic distance from family creates a sense of isolation and disconnection from tribal influences and cultural identity factors (Sage, 1991).

Another effect of the forced assimilation of Native Americans into the dominant culture can be seen in the reactions of some "transitional" members. Native Americans who

find themselves fairly acculturated into the mainstream way of life often have little sense of their cultural heritage. These people will still experience racism in many ways, simply due to the color of their skin, yet often find this in conflict with their relinquishment of traditional ethnic practices and beliefs. The internalization of this paradox manifests itself in many ways, including depression, reverse racism against their "drunken" relatives and "survival guilt" related to their own successes (Tafoya, 1989).

Current effects of the Native American experience with oppression include educational failure, career barriers, and suicide. Because the public educational system does not readily accommodate cultural differences in learning styles, languages and values, many Native American students become mired in failure and helplessness with a resulting rate of approximately 60% dropping out of high school (Herring, 1992). Like other minorities, Native Americans are disproportionately under represented in professional careers. The average unemployment rate on reservations is 60% (Herring, 1992) and can be attributed to factors such as lack of jobs or training, inability to finance education, and perceptions of failure as students. Suicide rates among young Native American men have risen 200% since 1983 (Reddy, 1993) and are approximately twice that of the national average (Herring, 1992). Assessment of Native American individuals and families in a therapeutic setting is most appropriate when approached from a position that includes information about relevant socio-cultural factors.

By understanding the social and cultural experiences of Native Americans (i.e. reservation assimilation, lack of educational and employment opportunities, suppression of traditional ways of life), counselors improve their ability to assess the functioning of these

systems. The influence of ethnic and environmental factors on perceptions of cohesion and adaptability among Native Americans impacts therapeutic conceptualizations about appropriate functioning and change within the family. This study examining the applicability of the Circumplex Model of Families with Native American kinship systems helps to address how the distinctive qualities and experiences of Native Americans integrate with norms about healthy family functioning. In addition, the study will suggest how to most appropriately assess family functioning among Native Americans in light of culturally distinct perceptions of cohesion and adaptability.

CHAPTER 3

METHOD

Population and Sample

The Fort Peck Reservation is located in the northeastern corner of Montana and is classified as Sioux-Assiniboine tribal land. It is a rural area with several small communities which include Native American and non-Native residents. The population on the reservation is 10,722 (Tiller, 1996), with a tribal membership of 5,146 (Reddy, 1993). The population in Poplar, MT, where this study was conducted, is 878 (Poplar, 1990). The unemployment rate in this area is 29.7%, while the average annual income on the reservation is $4,778 (Tiller, 1996). Sixty-one percent of adults at Fort Peck have at least a high school diploma (Tiller, 1996). The researcher's participation in an affiliated grant (Clarke, 1997) provided the opportunity to conduct this study with a small sample of residents. Due to location and population, the residents of Fort Peck are considered to be a sample of a rural, reservation population.

A questionnaire was distributed to 15 women attending a parenting workshop in Poplar, Montana. The workshop was offered in combination with several other outreach programs (e.g., substance abuse prevention, foster grand parenting, and classroom mentors) aimed at elementary school children and their families. The larger, overarching study of which this study was a part, included collection of longitudinal data to study the effects of

these programs on the sample group through high school (e.g., subsequent substance abuse, school drop-out rates).

Random sampling procedures were not used by the researcher due to modest participation in the parenting workshop. Data were collected from each member of the group. Membership in the parenting group was voluntary and limited to parents with children or grandchildren currently attending the elementary school in Poplar, MT. The sample was composed of women living on Sioux-Assiniboine tribal land. Due to the small sample size, further demographic information (i.e. socioeconomic status, marital status, tribal affiliation) was not recorded in an effort to protect the confidentiality of the participants.

No attempt was made to categorize the sample as members of clinical or non-clinical families. The majority of participants reported attendance at the parenting workshop in an effort to improve their parenting skills and decrease levels of stress and frustrations related to child-rearing. Although issues surfaced which might have indicated a clinical nature for some families, these issues were not recorded.

Instrument

Cohesion and adaptability were measured by the Family Adaptability and Cohesion Evaluation Scales II (FACES II) questionnaire for use with the Circumplex Model. FACES II is a 30 item measure, with 2-3 items for each of fourteen areas within the dimensions of cohesion and adaptability (Olson, Bell, & Portner, 1995). The dimension of cohesion is described by emotional bonding, boundaries, coalitions, time, space, friends, decision-making, family interests and recreation. Adaptability includes assertiveness, leadership, discipline,

negotiation, roles and rules. The original version of FACES was designed to measure individual perceptions about these characteristics in relation to the current family system (specifically those members in the home). A study of 2,412 families (Olson et al., 1983) found significant internal consistency, with total sample Cronbach alpha levels as follows: cohesion 0.87, adaptability 0.78, total scale 0.90. Changes from the original FACES measure reflect efforts by researchers to improve ease of administration, internal consistency, and validity of measured items (Olson et al., 1995) and have resulted in the subsequent FACES II and FACES III instruments.

FACES II is a self-report questionnaire (Appendix) and was the version used in the current study. Respondents rate their families on a Likert-type scale, indicating the applicability of each item from "almost always" to "almost never." The questions reflect individual perceptions about overall family cohesion and adaptability and scoring is based on these dependent variables. In a comparison of FACES II with the more recently developed FACES III, the researchers (Olson et al., 1995) reported a higher alpha reliability (FACES II=0.90; FACES III=0.68) ,based on greater number of measured items, and concurrent validity (FACES II=cohesion 0.93, adaptability 0.79; FACES III=cohesion 0.84, adaptability 0.45). Therefore, FACES II was recommended over FACES III for research purposes (Olson et al., 1995).

Many studies have been conducted to evaluate and validate the use of FACES to describe families according to the Circumplex Model. Clark (1984) administered FACES II to non-clinical families and families with a schizophrenic or neurotic member. The non-clinical families scored predominately as Balanced (48%) while the families in both clinical

groups scored predominately as Extreme (56% of schizophrenics and 64% of neurotics). Garbarino, Sebes, & Schellenbach (1985) administered FACES II to families at high and low risk for poor functioning. The results supported the hypothesis with high risk families scoring as predominately Extreme and the low risk mostly Balanced. Studies of families with delinquent children (Rodick, Henggeler, & Hanson. 1986) and sexual offenders (Carnes, 1987) duplicate these findings, with the clinical families scoring predominately as Extreme family types and the non-clinical control groups scoring as Balanced. Research supports the use of FACES II to assess family functioning and to discriminate between clinical and non-clinical families on the Circumplex Model.

Further research indicates the facilitative nature of communication in relation to levels of cohesion, adaptability, and family functioning. Barnes and Olson (1983) examined the role of communication and their results indicated that non-clinical families scoring mostly Balanced evidenced more positive communication patterns. Rodick et al. (1986) replicated these findings among mothers of Balanced families who displayed increased positive communication styles, direct messages to members of system and positive emotional affect, compared to those in Extreme families. In sum, the research supports the use of FACES to determine family functioning according to the Circumplex Model, as well the use of communication to predict adequate family functioning.

Scoring and interpretation information provided by the developers of the questionnaire (Olson et al., 1995) enabled the researcher to code the items and compute the scores for cohesion and adaptability. Following this, the researcher converted the raw scores into category scores to determine the level of cohesion and adaptability for each participant.

These scores were later combined to determine family typology on the Circumplex Model for interpretation and comparison to normative data. The normative data related to the Circumplex Model (Olson et al., 1983) is quite extensive. For purposes of this study, the normative data used for comparison was limited to the larger sample of parents as they are represented on the Circumplex Model according to family typology (N=2224), except for analysis of the categories of cohesion and adaptability, which were compared to the normative data from parents with adolescent children (N=1315). This cohort sample (N=1315) from the norming study (Olson et al., 1983, cited in Flores & Sprenkle, 1989) served as a limited sized group with which to compare the Native American sample.

Procedure

After a review of the literature and development of the research questions, data collection began. The FACES II questionnaire was completed at the first session for all participants, except for two collected during the third session by parents beginning the class later. Data collection continued with the implementation of a second workshop, but for purposes of this pilot study, only the first workshop data were used in order that data analysis could begin in a timely manner.

The FACES II questionnaire was accompanied by a questionnaire related to parenting styles that was part of another study. The average time participants spent completing the forms was 15 minutes. The researcher answered respondents' questions about individual items. The question asked most by participants was whether they should answer specific items in relation to their whole families or in relation to the people who currently lived in their

homes. Participants were advised to answer each item in a way which best reflected how they currently saw their families, considering the fact that household membership changed frequently.

Data Analysis

Statistical analyses were conducted to test hypotheses related to whether Native American extended families would score differently on the Circumplex Model than Anglo-American families. Specifically, the hypotheses were:

H1: Native American scores will be statistically different from Anglo-American scores on the dimension of cohesion;

H2: Native American scores will be statistically different from Anglo-American scores on the dimension of adaptability;

H3: Native American scores will be statistically different from Anglo-American scores on family typology in the Circumplex Model.

H4: Native American scores will be statistically different from Anglo-American scores on the sixteen family types represented by the Circumplex Model.

The analyses consisted of several stages. First, both cohesion and adaptability scores from the Native American sample and the Anglo-American group were analyzed using chi square tests to determine the distributions among the four levels on each dimension. Second, scores for cohesion and adaptability were combined into family types on the Circumplex Model, to determine the distributions by ethnic group among the three regions of Extreme,

Mid-Range, and Balanced. Finally, the results were analyzed according to the distributions of the levels of cohesion, adaptability and the sixteen family types.

To analyze the overall distributions within the Circumplex Model, scores for each group (Native American=sample group; Anglo-American=normative baseline group) were computed according to the means and standard deviations on the characteristics of cohesion and adaptability. No attempt was made by the researcher to compute a t-test for difference among means. Due to the substantial difference in sample sizes (Native American = 15, Anglo-American = 2224 and 1315) and the lack of individual scores for the normative group, a statistical analysis of the means was determined to be inappropriate (Gay, 1996; Glass & Hopkins, 1996). Instead, the mode of analysis relied on non-parametric comparisons of the distributions for each group within cohesion and adaptability, specifically chi square tests of independence. The data was handled by converting the percentages of outcome among the normative group into numbers of individuals scoring on the characteristics of cohesion, adaptability, and family types. For each frequency distribution and chi square test, the expected outcomes among the Native American sample group were calculated as individual scores based on the observed percentages of the Anglo-American baseline group (Olson & McCubbin, 1983).

To calculate the chi square used to determine the critical values for each frequency distribution, the researcher used the sum of the square of observed outcomes (from the baseline group) minus the expected outcomes (from the sample group), divided by the observed outcomes [(O - E) (O - E) / O]. Percentages of sample outcomes were also determined for Extreme, Balanced and Midrange family types. These scores enabled the

researcher to compare outcome of family typology among the sample group with the outcome from the normative, baseline group (Olson et al., 1983).

Significant differences between sample scores and normative scores were examined using a frequency distribution. Chi-square tests of independence were applied to compare outcome measures on cohesion, adaptability, and family typology for each group. Following the statistical analysis, the researcher used information regarding Native American extended family systems and cultural factors to help explain the scores.

CHAPTER 4

RESULTS

Distribution of Scores on Cohesion and Adaptability

Table 1 shows the mean scores for each group (Native American and Anglo American) on categories of cohesion and adaptability. The cut-off points for each category on the dimension of cohesion are as follows: disengaged scores of 56.9 or lower; separated scores of 57.0 - 65.0; connected scores of 65.1 - 73.0; and enmeshed scores of 73.1 or higher. The cut-off points for each category on the dimension of adaptability are as follows: rigid scores of 43.9 or lower; structured scores of 44.0 - 50.0; flexible scores of 50.1 - 56.0; and chaotic scores of 56.1 or higher (Olson et al., 1989) . The cut-off points for each dimension are graphically displayed in Table 7. On the dimension of cohesion, the Native American mean was 57.1 (separated), while the Anglo-American mean was 64.9 (connected). On the dimension of adaptability, the sample mean was 42.2 (structured), and the baseline mean was 49.9 (flexible).

On both cohesion and adaptability (Table 1), the Native American sample had a lower mean than did the Anglo-American group, placing them in different categories of the cohesion and adaptability dimensions. The differences between each set of means, however, were not great.

Table 1. Anglo- American and Native American Cohesion and Adaptability Scores

	Anglo-American N = 1315	Native American N = 15
COHESION		
Mean	64.9	57.1
S D	8.4	9.4
Range	16 - 80	41 - 74
ADAPTABILITY		
Mean	49.9	42.2
S D	6.6	5.06
Range	16-80	36 - 52

The standard deviation for the Native American sample group mean on cohesion was greater than that of the Anglo-American baseline group, while on adaptability the sample standard deviation was smaller than the baseline group. In other words, there was more variance in Native American scores than in Anglo-American scores on the dimension of cohesion, with little variance between the groups on the dimension of adaptability.

Table 2 shows the percentages of Anglo-American and Native American scores on each category of cohesion. The Anglo-American baseline percentages are higher than those of the Native American sample on the categories of enmeshed, connected, and disengaged. However, on the category of separated, the sample group percentage is higher (46 %) then the baseline percentage (34 %).

Table 2. Percent of Anglo-American and Native American Cohesion Scores

COHESION	Anglo-American N = 1315	Native American N = 15
Enmeshed	14 %	13 %
Connected	36 %	26 %
Separated	34 %	46 %
Disengaged	16 %	13 %

(Note percentages total less than 100 % due to rounding)

The percentages of scores in the baseline group and in the Native American sample on each category of adaptability are represented in Table 3. The sample group percentages on flexible (26 %) and structured (33 %) were lower than those of the baseline group (29% and 38% respectively). The percentage of rigid scores in the Native American sample group was 40 %, while the percentage of Anglo-American scores on the rigid category was 16 %. On the characteristic of chaotic, the baseline scores totaled 16 %, while the sample group had no chaotic scores.

Table 3. Percent of Anglo-American and Native American Adaptability Scores

ADAPTABILITY	Anglo-American N = 1315	Native American N = 15
Chaotic	16 %	0 %
Flexible	29 %	26 %
Structured	38 %	33 %
Rigid	16 %	40 %

(Note percentages total less than 100 % due to rounding)

Table 4 shows the frequency tables for the chi-square test of independence used to analyze the observed sample group outcomes (n=15) on four categories of cohesion, as compared to the expected outcomes from the baseline data (n=1315). To test the first hypothesis for difference on cohesion levels, an alpha level of 0.05 was used to ensure 95% confidence in detected differences. The data supported the null hypothesis that the difference between scores on cohesion for Native Americans and Anglo-Americans was not statistically different.

Table 4. Frequency Distributions for Cohesion

COHESION	Disengaged	Separated	Connected	Enmeshed
Observed	2	7	4	2
Expected	2.5	5.1	5.5	2

(Observed frequencies based on Native American $N = 15$; Expected frequencies based on Anglo-American $N = 1315$, with the following outcome percentages: 16.3% disengaged, 33.8% separated, 36.4% connected, 13.6% enmeshed)
chi square $(3, N = 15) = 0.95$, $p = 0.352$

To test the second hypothesis, a chi-square test for independence was applied to the adaptability scores for the sample group, comparing these scores to the expected outcomes from the baseline group (Table 5). The data from this analysis allowed rejection of the second null hypothesis and indicated a statistically significant difference between the scores of Native Americans and Anglo-Americans on the dimension of adaptability.

Table 5. Frequency Distributions for Adaptability

ADAPTABILITY	Rigid	Structured	Flexible	Chaotic
Observed	6 *	5	4	0
Expected	2.4 *	5.7	4.4	2.4

(Observed frequencies based on Native American $\underline{N}$ = 15; Expected frequencies based on Anglo-American $\underline{N}$ = 1315, with the following outcome percentages: 16.3% rigid, 38.3% structured, 29.4% flexible, 16.1% chaotic)
chi square (3, $\underline{N}$ = 15) = 7.9, $\underline{p}$ = 0.05 * indicates significant difference

Using a two by two analysis of the frequency distribution for adaptability, each category (chaotic, flexible, structured, rigid) was factored out individually and tested using a chi-square test for independence. For example, the expected and observed scores for chaotic, flexible, and structured were combined into one cell, while the expected and observed values for rigid were placed in the other cell. This enabled the researcher to determine on which category of the dimension of adaptability the sample group was different than the normative group. This process was repeated for each of the categories of adaptability. Neither the structured nor flexible categories produced a significant difference. The difference on the category of chaotic, [chi-square (2, $\underline{N}$ = 15) = 2.307, $\underline{p}$ = 0.11] was not statistically significant at the 0.05 level. Analysis of the rigid category indicated a significant difference among the scores of Native Americans and Anglo-Americans [chi-square (2, $\underline{N}$ = 15) = 4.23, $\underline{p}$ = 0.03). Therefore, rejection of the null hypothesis that there will be no difference among the scores of the Native American sample and the Anglo-American baseline group on the dimension of adaptability can be attributed to significant difference on the rigid category.

Test of Family Typology

The third hypothesis was tested by examining the distribution of families from both groups into the three regions of the Circumplex Model: Balanced, Mid-Range, and Extreme. To score as Balanced, both cohesion and adaptability scores were in one of the middle two categories (for cohesion this is connected or separated; for adaptability this is flexible or structured). To score as Mid-Range, scores on either cohesion or adaptability were in one of the middle two categories and the other score was in one of the two extreme categories (for cohesion this is disengaged or enmeshed; for adaptability this is chaotic or rigid). To score as Extreme, both cohesion and adaptability scores were in extreme areas. The family types on the Circumplex Model are graphically represented in Figure 1. More of the Native Americans (46%) and Anglo-Americans (53%) scored in the Balanced and Mid-Range categories than in an Extreme category. Thirty-nine percent of the Native Americans and 32% of the Anglo-Americans scored as Mid-Range. Extreme family types were found in 13% of the Native Americans and 15% in the Anglo-Americans. Thus the percentage of families categorized as Extreme was similar in both groups.

Using a chi-square test for independence, the observed and expected measures of Extreme, Mid-Range, and Balanced family types provided no evidence of difference between the responses of the Native American sample (n=15) and those of the baseline data (n=2224). Table 6 shows the frequency table used to analyze the family types among the two groups [chi-square (3, $\underline{N} = 15$) = 0.4391, $\underline{p} = 0.93$]. This result supported the null hypothesis of no difference between group scores on family type.

Table 6. Frequency Distributions for Family Types

FAMILY TYPE	Balanced	Mid-Range	Extreme
Observed	7	6	2
Expected	7.94	4.8	2.25

(Observed frequencies based on Native American N = 15;
Expected frequencies based on Anglo-American N = 2224, with the following outcome percentages: 53% Balanced, 32% Mid-Range, 15% Extreme)
chi square (3, N = 15) = 0.4391 , p = 0.93

Overview of Family Types

The categories of family types are represented in Table 7. The Anglo-American scores of Extreme are divided among chaotically-enmeshed (7 %) and rigidly-disengaged (8 %), while 13 % of the Native American sample of Extreme family types were scores of rigidly-disengaged. In the Mid-Range families, Native American scores were either flexibly-enmeshed (13 %), rigidly-separated (13 %), or rigidly-connected (13 %). None of the scores from the sample were chaotic, while 9 % of the Anglo-American group were in three of the four chaotic categories. Among the baseline group, Mid-Range scores were distributed among all eight categories, while the Native American group captured only three categories (rigidly-separated, rigidly-connected, flexibly-enmeshed). With sixteen possible family types and a Native American group of 15, the small sample size in the current study was unable to represent all family types.

Within the Balanced family types, Anglo-American (18 %) scores were more flexibly-connected, while no scores among the Native American sample were in this category. The highest scores for Balanced among the Native American sample (20 %) were in the

structurally-separated category. None of the Mid-Range scores in the Native American sample were either structurally-disengaged or structurally-enmeshed. The more balanced categories of structurally-separated and structurally-connected captured 33% of the Native American sample.

Table 7. Anglo-American & Native American Groups by the Dimensions of Cohesion and Adaptability on the Circumplex Model of Families

Cohesion Adaptability	Disengaged - 56.9	Separated 57.0-65.0	Connected 65.1-73.0	Enmeshed 73.1 +
Chaotic + 56.1	AA 0% NA 0%	AA 2% NA 0%	AA 7% NA 0%	AA 7% NA 0%
Flexible 50.1-56.0	AA 1% NA 0%	AA 9% NA 13%	AA 18% NA 0%	AA 6% NA 13%
Structured 44.0-50.0	AA 6% NA 0%	AA 14% NA 20%	AA 12% NA 13%	AA 2% NA 0%
Rigid - 43.9	AA 8% NA 13%	AA 6% NA 13%	AA 2% NA 13%	AA 0% NA 0%

AA=Anglo-American baseline data, N=2224
(Olson, et al., 1983)
NA=Native American sample data, N=15
(FACES cut points for characteristics in cells)

The frequency distributions for the chi-square test of independence used to test the fourth hypothesis is represented in Table 8. Based on the observed scores from the sample group, the expected responses were not significantly different [chi square (15, N = 15) = 19.437, p = 0.05] and the null hypothesis of no difference between the scores of the Native American sample and the Anglo-American baseline group was retained. However, it is

important to note that there was a trend toward more structured (33 %) and rigid (39 %) scores among the Native American sample.

Table 8. Frequency Distributions of Family Types on the Circumplex Model

CIRCUMPLEX MODEL FAMILY TYPES	Observed	Expected
chaotically-disengaged	0	0
flexibly-disengaged	0	0.15
structurally-disengaged	0	1
rigidly-disengaged	2	1.2
chaotically-separated	0	0.3
flexibly-separated	2	1.35
structurally-separated	3	2.1
rigidly-separated	2	1
chaotically-connected	0	1.05
flexibly-connected	0	2.7
structurally-connected	2	1.8
rigidly-connected	2	0.3
chaotically-enmeshed	0	1.05
flexibly-enmeshed	2	1
structurally-enmeshed	0	0.3
rigidly-enmeshed	0	0

(Observed frequencies based on Native American $\underline{N} = 15$;
Expected frequencies based on Anglo-American $\underline{N} = 2224$, with outcome percentages represented as parent scores in Figure 2
chi square (15, $\underline{N} = 15$) = 19.437, $\underline{p} = 0.20$

CHAPTER 5

DISCUSSION AND CONCLUSIONS

Discussion of Results and Theory

The scores of the Native American sample were significantly different than the scores of the Anglo-American group on the dimension of adaptability in the Circumplex Model. Specifically, there were proportionally more Native American scores that fell into the rigid areas of the model. Most of the scores from the sample were rigidly connected, which indicates a level of closeness combined with a fixed structure. According to the developer of the model (Olson, 1993), families who score as rigid are marked by high levels of parental control, well-defined roles, and enforced rules. In addition, rigid families tend to function within routines and rituals, and decisions are generally made by members at the top of the hierarchy.

Very few of the participants from the Native American sample scored as flexible. Examination of FACES II (cited with permission from Olson, Bell, & Portner, 1995) reveals that those items related to adaptability include issues of problem solving, rules, opinions, and discipline. With the assumption that flexible families according to the Circumplex Model will negotiate conflict and discipline openly among members (# 26- when problems arise, we compromise) , then it seems likely that rigid families will address conflict less openly among members. In Native American families, conflict is often addressed through distancing and

diffusion of affective responses between members. Therefore, it seems important to consider the definition of adaptability and the ways this definition may differ among ethnic groups.

Within extended family systems, a sense of structure among the many members is supported by defined hierarchal roles and rules which maintain a sense of balance. In this way, the Native American extended family avoids the chaos that might develop among a large familial membership. The sample group, in fact, evidenced no families with scores of chaotic. Although the small sample size precluded scores in all areas of the Circumplex Model, the lack of chaotic family types among the Native American group supports the literature indicating that extended, ethnic family systems function mostly as rigid and rarely as chaotic (Vegas et al., 1986; Woehrer, 1989).

Native American families rely on the structure of the extended system of kin and non-kin to provide a sense of safety and security from external stressors (Johnson, 1995; LaFramboise et al., 1990; Tafoya, 1989). In this way, rigidity can be viewed as a function of resiliency in extended family systems. Johnson (1995) defines resiliency as, "a family's ability to use its inherent strengths to challenge and triumph over adversity" (p. 318). Within the Native American extended family system, this resiliency can be seen in the way elders are relied upon as role models to various members, the value of the community as an augmentation to the family, and the preservation of a culture despite socio-cultural factors suppressing this paradigm.

This analysis did not show a difference between Native American families and Anglo-American families on the dimension of cohesion in the Circumplex Model. The scores of the Native American sample were predominately separated and connected on the dimension of

cohesion, indicating a possible tendency toward these characteristics among the sample group. Olson (1993) describes separated families as marked by levels of limited closeness and loyalty, with moderate levels of affective communication. In addition, these families function within clear generational boundaries and value a level of distance between members and time alone. Connected families are generally more involved with each other, while allowing distance between members. The generational boundaries in connected families remain clear, privacy is respected, and decisions are often made together (Olson, 1993).

In Native American families, separateness can be seen in the respect placed on autonomy and in the development of personal respect through attainment of skills and wisdom (Red Horse, 1980). While the individual is valued, there exists a connection to the family and to the larger, natural system as well (Herring, 1992). Hierarchy in Native American families is marked by high levels of respect for elder members and participation of many members in child-rearing. In addition, during times of conflict, members may seek distance from each other and evidence little affective response until the tension subsides (Tafoya, 1989).

The literature suggests that ethnic, extended family systems are often enmeshed according to the Circumplex Model (Woehrer, 1989). However, the sample group in this study represented very few enmeshed systems. Families with an enmeshed level of cohesion are marked by high involvement and an accepted degree of dependency among members. Enmeshed families require loyalty to the family first and spend more time together than apart (Olson, 1993). Although Native American family systems rely on the connectedness of the community and often maintain proximity between members, the emphasis on independence is integrated into this sense of closeness. In addition, socio-cultural and historical factors may

impact the development of lower levels of dependency among members. The implementation of the reservation system and the subsequent boarding school phenomenon divided many people from their families and communities. As a result of these types of stressors, many Native Americans experience a low sense of tribal identity and decreased self-esteem, which often develop into clinical issues such as substance abuse, depression, and suicide (LaFramboise et al., 1990; Miller, 1982; Tafoya, 1989). A level of separateness may develop among Native Americans as a means of coping with the loss of personal choice and distance from family members.

The sample group did not score significantly differently than the baseline group on family typology, yet the presence of more Native Americans in the Mid-Range category and fewer in the Balanced category may indicate a way this population differs from Anglo-Americans. Research using the Circumplex Model with other ethnic populations has measured levels of acculturation, socioeconomic status, and education level, and related differences on the outcome of family typology to these factors (Flores & Sprenkle, 1989; Vega et al., 1986). Although no measures of these factors were used in the current study, demographic information about reservation populations indicates high levels of poverty and low levels of education overall (The Confederation of American Indians, 1986; Reddy, 1993; Tiller, 1996). Acculturation levels among reservation populations might tend to be lower and less integrated with dominant U.S. norms and values, due in part to geographic isolation. Instead of indicating pathology, low acculturation may explain differences in functioning.

Although data was not collected in the current study which would describe the levels of communication among members of the sample, the relationship between communication,

cohesion, and adaptability on the Circumplex Model seems important to assess among Native American families. Communication is a facilitative component of family typology and this relies on the assumption that families with high levels of communication negotiate developmental and environmental stressors and change more effectively than families with low levels of communication (Olson et al., 1983). Cultural standards of communication between members and within a hierarchy in Native American family systems might indicate difficulty negotiating levels of cohesion and adaptability and suggest pathology according to the Circumplex Model where there is none.

The characteristics specific to this sample group limited participation to those people with children or grandchildren in the local elementary school. Since the psychoeducational parenting group was voluntary, the people who attended may have represented a higher functioning sub-sample of the reservation population. In addition, it was noted that several attendees asked the researcher how they should answer the items on FACES II, specifically if they should relate them to their entire family or to the people currently living in their home. This type of question suggests that extended families with changing household memberships may have difficulty accurately reporting a complete representation of the family system using the FACES II measure. By assessing the representativeness of the sample in the current study, issues which may have skewed the results (i.e. only women in the sample) can be identified according to cultural identity and availability standards.

Conclusions and Implications for Practice

In the current pilot study of the applicability of the Circumplex Model of Families to

a sample of Sioux Assiniboine parents on Montana's Fort Peck reservation, differences between the scores of the sample group were compared to scores from Anglo-American normative data. Significant difference was detected on the dimension of adaptability, specifically on the characteristic of rigid, with a higher number of Native American than Anglo-American scores represented. This finding, although tentative due to difference in sample sizes, supports previous research related to both Native American and extended family systems (Flores & Sprenkle, 1989; Johnson, 1995; LaFramboise et al., 1990; Miller, 1982; Olson, 1993; Red Horse, 1980; Sage, 1991; Tafoya, 1989; Vega et al., 1986; Woehrer, 1989). This finding supports the importance of further study to ascertain differences and similarities between Native American groups and other ethnic groups in the U. S. By embedding differences within a cultural and structural framework, theorists and clinicians can more effectively ascertain the degree of functional behavior exhibited by family systems.

By studying the effectiveness of the Circumplex Model of Families for use with Native Americans, researchers and therapists can increase their knowledge related to ethnic and cultural differences within the framework of a well-studied model of family assessment. In addition, the assessment of family strengths in Native American systems facilitates effective change with clinical families. Evaluating current counseling models according to a variety of cultural paradigms encourages an enhanced understanding of theory.

The Native American extended family system plays an integral role in the assessment of family functioning. Counselors should expand their definitions of family to include a variety of systems and their specific strengths to avoid inaccurate pathologization among ethnically diverse populations.

> "Problem recognition occurs in a cultural, social, and economic context, and there may be instances where what is perceived by clients as normality or as the working out of some inevitable sequence of events is to the professional an instance of pathology, requiring intervention and corrective action (Green, 1982, p.33).

In Native American families, inaccurate problem identification might be prevented by counselors who explore individual perceptions of family strengths prior to diagnosing pathology.

The counseling implications of this study center on increased understanding of Native American culture and values, and assimilation of these characteristics into current practice. The limited statistically significant difference in the current study does not imply that therapists should ignore cultural differences when assessing ethnic families. Rather, understanding strengths that families bring from their cultural values can be used in the therapeutic process on many levels. For example, many Native Americans will seek help with problems from members of the extended family. Replacing this paradigm with the assumption that therapy is more healthy and productive than reliance upon family implies a disregard for traditional strategies. By encouraging the client to connect with someone from the family or community therapy is empowering him/her to find this source of lasting support.

In family therapy, the focus on process is optimal for change in Native American systems (Herring, 1992). The non-directive and observational style fits well with Native American patterns of talking and not talking, self worth and mutuality, and therapeutic use of humor. By integrating family therapy techniques and theory into practice with ethnic families, practitioners indirectly address the similar contradictions between the dominant cultural standards and culturally specific values.

Recommendations for Research and Practice

The current pilot study can be considered an initial exploration into the classification of Native American family systems according to the Circumplex Model and outcomes indicate differences which deserve further study. Points to consider are related to research design and conceptualization. First, further research of this topic should include a larger sample to increase levels of significance and better represent the cohort being examined. By sampling several different groups of Native Americans, research can better describe the differences among tribal populations.

Differences between Native American groups and Anglo-American groups could be more fully described by correlating measures of family type with measures of acculturation, economic status and perceptions of social desirability related to measurement items. By conducting focus groups with members of the sample, researchers could discuss individual perceptions of the items on FACES II and develop a broader understanding of any differences or similarities between Native American families and other ethnic groups.

Finally, it is recommended that data be collected on multiple members of Native American families for analysis of couple and family scores on the Circumplex Model. With this information, researchers can compare family typology between groups, as reported by children, mothers, and fathers, as well as combined couple and family scores. The current study is limited by its ability to measure only the scores reported by female members of family systems. By studying the reports of women only, the results are descriptive of a female perspective on family functioning. Further research in the field of family therapy will expand

and increase available knowledge about Native American family types from the perspective of several family members. This information serves practitioners in their efforts to improve individual and family functioning among Native Americans on reservations across the country.

Among ethnically diverse groups, consideration of cultural differences becomes an integral part of the counseling relationship. By gaining, "knowledge of Native American customs and culture...(therapists can) proceed to evaluate the various approaches and techniques and choose the most effective one" (Lewis & Ho, 1975, p.379). By disregarding these elements, counselors may apply theories, styles and measures which do not adequately meet the needs of their Native American clients.

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APPENDIX
FACES II: Family Version

1. Family members are supportive of each other during difficult times.
2. In our family, it is easy for everyone to express his/her opinion.
3. It is easier to discuss problems with people outside the family than with other family members.
4. Each family member has input in major family decisions.
5. Our family gathers together in the same room.
6. Children have a say in their discipline.
7. Our family does things together.
8. Family members discuss problems and feel good about the solutions.
9. In our family everyone goes his/her own way.
10. We shift household responsibilities from person to person.
11. Family members know each other's close friends.
12. It is hard to know what the rules are in our family.
13. Family members consult other family members on their decisions.
14. Family members say what they want.
15. We have difficulty thinking of things to do as a family.
16. In solving problems, the children's suggestions are followed.
17. Family members feel very close to each other.
18. Discipline is fair in our family.
19. Family members feel closer to people outside the family than to other family members.
20. Our family tries new ways of dealing with problems.
21. Family members go along with what the family decides to do.
22. In our family, everyone shares responsibilities.
23. Family members like to spend their free time with each other.
24. It is difficult to get a rule changed in our family.
25. Family members avoid each other at home.
26. When problems arise, we compromise.
27. We approve of each other's friends.
28. Family members are afraid to say what is on their minds.
29. Family members pair up rather than do things as a total family.
30. Family members share interests and hobbies with each other.

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