

THE UNIVERSITY OF CALGARY

Family Strengths in Households of Young Handicapped and Nonhandicapped Children:

A Comparative Study

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

THE DEGREE OF MASTER OF SOCIAL WORK

FACULTY OF SOCIAL WORK


CALGARY, ALBERTA

AUGUST, 1994

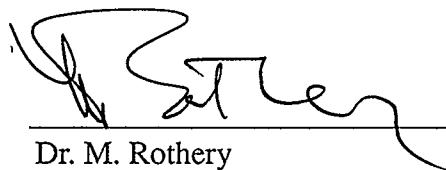
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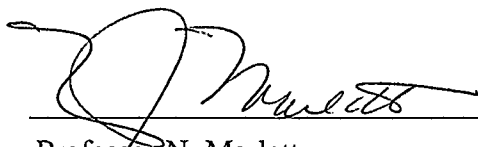
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ABSTRACT

The purpose of this study was to compare the strengths in families of young handicapped children with the strengths in families without handicapped children. Family strengths were defined as, "...the competencies and capabilities of both various individual family members of the family unit that are used in response to crisis and stress, to meet needs to promote, enhance and strengthen the functioning of the family system" (Trivette et al., 1990). The research hypothesis stated that families with handicapped children would show different strengths than did families without handicapped children. To test this hypothesis, twenty-six participants with handicapped children and thirteen participants without handicapped children completed three measures: the Family Functioning Style Scale (FFSS), the Information on Primary Caregiver questionnaire and the Information on the Child in Family with Disability questionnaire. An independent sample t-test was used to compare the two groups on the dependent variable of family strengths. Correlational procedures were used on the FFSS scale items (Mann Whitney U) and selected demographic characteristics (Pearson's r). The results of the study indicated that the strengths of families with handicapped children did not differ with statistical significance ($p \leq .05$) from the strengths of families without handicapped children. The data did however identify a relationship between the FFSS subscale variables of positivism and appreciation and families with handicapped children. Consideration was given to the limitations of the study as well as the implications for social work practice and research.

ACKNOWLEDGEMENTS

The contributions of those who assisted with the study are gratefully acknowledged. In particular, I thank Dr. Peggy Rodway for her support and guidance during the completion of this study.

I would also like to thank Dr. Michael Rothery and Professor Nancy Marlett who served as committee members. Their time and consideration has been appreciated.

A warm thanks is extended to the twenty-six participants from the Pediatric Neuromuscular Unit and the thirteen participants from the Children's House Daycare. Their cooperation allowed this study to proceed.

Additionally, I would like to thank my friend and colleague, Heather Coleman, for her assistance with the statistical procedures. I am also grateful to Jay DeMars for her professional word processing skills.

The members of my family deserve a special thank you. Grant, my partner, provided support and encouragement throughout the study. My children, Jonathan, Timothy and Alison were very patient and understanding.

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CHAPTER ONE

INTRODUCTION

Childbirth is a time of great change and potential crisis for all families. Parents want happy, healthy, normal children. It is natural for sadness and disappointment to occur when a child is identified as having problems that may require lifelong services. Families who care for children with handicaps are faced with different stressors and demands over their lifespan. Interestingly, most of these families appear to have the ability to meet the day-to-day demands of the handicapped child, as well as continue to meet the needs of the other family members, the marriage, and the family unit. It is these critical family strengths that was the focus of this research endeavour.

Interest in family strengths and their relationship to healthy family functioning began in the early 1960's with the pioneering work of Otto. In the ensuing three decades, the research in this area has taken several different pathways. Descriptive studies produced a great deal of data about the characteristics of strong families, including such items as family unity, quality time together (Stinnett & DeFrain, 1985); effective communication (Otto, 1963); autonomy (Beavers, 1982); and satisfaction with life in general (Olson & McCubbin, 1983). A second area of research looked at families with handicapped children to determine their areas of weakness or deficits in family functioning as a result of having a child with special needs. Professionals embraced the concept of anticipated pathology (Hanline, 1991) and, as a result, a genuine bias existed throughout this literature toward expecting pathological outcomes in these families (Crnic, Friedrich, & Greenberg, 1983). As compared to parents with normal children, parents of handicapped children were found to experience more stress (Dyson, 1991; Friedrich & Friedrich, 1981); enjoy less psychological wellbeing (Frey, Greenberg, & Fewell, 1989; Sloper & Turner, 1993; Waisbren, 1980); and have less satisfactory social supports (Friedrich & Friedrich, 1981; Waisbren, 1980).

A third area of research emerged alongside the deficit studies as the result of inconsistencies in the literature findings. There appeared to be intervening variables or moderating influences upon a family's adjustment to its handicapped child. Reports of no greater stress (Frey et al., 1989; Gowen, Johnson-Martin, Goldman, & Applebaum, 1989); no less marital satisfaction (Kazak, 1987) and no lack of social supports (Dyson & Fewell, 1986) have raised more questions for the researcher that could not be explained away due to methodological faults alone. Unfortunately, these intervening variables that had been found to reduce stress were presented in the literature in a less than positive way, for the variables had been regarded as nothing more than mediators of stress rather than as factors contributing to a family's wellbeing (Wikler, Wasow, & Hatfield, 1983). Current perspectives do not assume family dysfunction and have noted that each family reacts differently to the crisis (birth of a handicapped child) and that adaptation to the crisis is affected by many factors (Hanline, 1991).

A growing body of research suggests that the presence of a disabled family member may contribute to the strengthening of the entire family unit (Wikler et al., 1983). This fourth area of research, focusing upon strengths in families with handicapped children, has taken a more positive, proactive approach. There is a new perception of these families as successful family systems whose existing strengths have led to the positive adjustment of raising a child with special needs. As a result, the literature is beginning to report the various strengths these families possess to raise their child with special needs. Studies have indicated that families with special needs children enjoy positive marital relationships (Kazak & Marvin, 1984); have strong personal faith and religious affiliations (Crnic et al., 1983); have adequate social supports (Dyson & Fewell, 1986); and increased family integration (Abbott & Meredith, 1986).

This recent interest in studying family strengths is encouraging. It was the purpose of this study to add to this growing body of literature by not only describing family strengths in households with handicapped children but by also offering some comparisons with family strength characteristics in households with nonhandicapped children. As Hewett (1970) pointed out, "...much has been written about the problems that beleaguer families with a handicapped child, but little about families who meet the crisis of a handicap as they meet other crises, with resilience and common sense" (p. 30).

Concepts

Trivette, Dunst, Deal, Hamer, & Propst (1990) provided the definition of the key concept of family strengths which was utilized in the thesis. "Family strengths are the competencies and capabilities of both various individual family members of the family unit that are used in response to crisis and stress, to meet needs and to promote, enhance and strengthen the functioning of the family system" (p. 18).

"Family functioning style refers to a combination of both existing strengths and capabilities and the capacity to use these strengths to mobilize or create resources necessary to meet needs" (Dunst, Trivette, & Deal, 1988, p. 24).

The client family is conceptualized as:

... the person or persons who come for help to a social agency and who expect to benefit directly from it; who determine, usually after some exploration and negotiation, that this was an appropriate move, and who enter into an agreement - referred to as a contract with the professional with regard to the terms of such service. (Garvin & Seabury, 1984, p. 82)

The research studies suggested that a wide range of child, caregiver and family characteristics may be associated with positive family adaptation to the presence of a child with a disability. General demographic information of the primary caregiver, such as age, sex, family size, education, marital status, religion and annual income had all been previously studied and found to have an impact upon positive adaptation in families

with handicapped children (Crnic et al., 1983; Dyson & Fewell, 1986; Friedrich & Friedrich, 1981; Trute & Hauch, 1988). The child variables of age, sex, diagnosis and severity of disability had also been studied by other researchers to determine their impact upon positive family adaptation (Beckman, 1983; Sloper & Turner, 1993; Trute, 1990). These various child, caregiver and family characteristics have been included in this study. The terms 'handicapped', 'disabled' and 'special needs' are used interchangeably throughout the thesis as a broad descriptor of the limitations for the young children of this study.

Implications for Social Work

The family with a handicapped child is an important client of social work services in our society, and thus, a better understanding of their functioning is necessary for improved practice, theory and policy development.

The emerging 'social work' practice paradigm is to support and strengthen families in a way that is an empowering experience that permits greater adaptations to both normal life changes and life crises (Rappaport, 1981). Prevention programs whose proactive interventions focus on restoring control of functioning to the natural support network rather than professional control over determining needs is a desirable model within this paradigm. This is especially important in work with families with handicapped children where usurpation of decision making and creation of dependencies often occurs as part of parental involvement with professionals (Dunst et al., 1988).

L'Abate (1990), in his work with the mental health field, further defines this proactive approach to include the concept of primary prevention. Primary prevention is an approach promoting conditions to increase competence and coping skills through programs of education and social engineering with the population at large and with special populations at high risk for potential breakdown. This approach is applicable to

the special population of families with handicapped children in that empowerment occurs through the mutual social support of the group and enablement is taught through skill training to negotiate needs. Indeed families with handicapped children need both sets of skills: empowerment and enablement in order to build upon their existing family strengths and achieve successful family functioning (Dunst et al., 1988).

Garbarino (1982) suggests that the family is the single most important environment for the child and that public policy makers "...must consider carefully the potential effects of their decisions on the parent's ability to provide for their children's physical needs and to maintain the enduring, supportive relationships that are necessary for emotional and social well being" (p. 219).

The Government of Alberta's Rainbow Report (1989) defines Public Health Policy in this report as " ...some of us require special attention because we have disabilities from birth onward... These needs, while different, must be identified and provided for some of us in the same context and values as those for all Albertans...in an atmosphere which encourages self-reliance but recognizes interdependence" (p. 3).

The most recent data available on special needs populations in Canada and Alberta was gathered in the 1986/1987 Health and Activity Limitation Survey (HALS). This report reveals that Alberta has a population of 30,000 children living with a disability who are under the age of 14 (p. 10). The Rainbow Report (1989) pointed out that in 1972, 97 percent of Calgary children with severe congenital disabilities, most under age three were institutionalized. Just four years later, only 12 percent were cared for outside the home (p. 51). While this was seen as a desirable stand, there was recognition in the Rainbow Report that although deinstitutionalization was appropriate, it was not without considerable burden and stress to many families.

Families were provided with government programs to ease in the transition of children with handicaps into the home environment. Programs such as Handicapped Children's Services provided cost-sharing arrangements for expenses related to respite care and out-of-the-ordinary costs associated with seeking medical care. Public education began to provide schooling for the handicapped child as young as the age of three. The Government of Alberta was responsive to the then stated needs of parents with handicapped children when these programs were implemented and as a result, families have been able to provide good physical and emotional care for their children.

It is no longer clear that Alberta government public policy towards children and other individuals with handicapping conditions is being developed with the best interests of the stakeholders in mind, let alone with their consultation. Much of the financial burden associated with raising a child with a handicap in the home has been shifted disproportionately to the families in the past three years with changes to the Alberta Aids to Daily Living Program, Handicapped Children's Services, and Alberta Health Care Benefits. The working paper of the Ministry of Education, *Meeting the Challenge* (1993), suggests that the special education programs for children with handicapping conditions such as the Program Unit Grant for preschoolers and the numbers of special education classroom assistants which allow children to be mainstreamed may be at risk due to inadequate funding.

Public policy, social work practice and social theory needs to be developed in consultation with families living with a child with a handicapping condition in order to meet the stated goals of empowerment and enablement.

This study was devoted to examining the nature of families as it relates to the concepts of family strengths in households with and without handicapped children. Chapter Two reviews the existing literature on this topic by laying the groundwork of the

‘wellness’ studies and delineating the subsequent three assumptions that have guided research on families who have a child with disabilities. Chapter Three discusses the methodology used in this study to discover the family strength characteristics. The fourth chapter summarizes the results/data obtained from the study group employing appropriate statistical analysis techniques. The final chapter discusses the relevant findings, the limitations of the study, and identifies the implications for social work practice and future research.

CHAPTER TWO

LITERATURE REVIEW

The study of family strengths has evolved in the literature as a result of four areas of research which share the importance of healthy family functioning as their common goal. The first area of research uncovered characteristics of healthy, strong, competent families and can be commonly described as family wellness studies. The second body of research was intent upon identifying the problems within families. This deficit model, which looked for what was missing in families, took a prominent role in the literature for several years. A third area of research emerged alongside the deficit studies as the result of inconsistencies in the literature findings. There appeared to be intervening variables or moderating influences upon a family's adjustment to its handicapped child. Within the last decade a fourth line of research has occurred which defines a competency model of families in which different family functioning styles are valued and the positive aspects of functioning are embraced and built upon. This chapter will discuss these four phases of research as it provides the basis for the ensuing research study.

Wellness Studies

In the early 1960s, there was a beginning recognition of the importance of studying healthy family functioning, in order to promote the development of well families, as well as enable better interventions with clinical families. The pioneering work of Otto (1963), although primarily descriptive, elucidated several key qualities.

In 1963, Otto noted that, "although the professional literature is replete with criteria for identifying 'problem families' and criteria useful in the diagnosis of family problems of family disorganization, little is known about how we might identify a 'strong family' " (Otto, 1963, p. 329).

In a pilot project and follow-up study, Otto (1963) attempted to clarify the definition of family strengths from the perspective of families themselves. He obtained his information from two sources. Initially, groups of families responded to the following open-ended Family Strength Questionnaire statement, "The following are what we consider to be major strengths in our family...". Secondly, an analysis was conducted of tape-recorded group sessions of couples who met for a series of twelve meetings for the purpose of discussing family strengths.

Although Otto's study had some limitations, particularly the widely varied backgrounds and family composition of the participants, his study produced twelve major dimensions of strong families. Table 1 lists these twelve major dimensions of strong families (see Table 1).

Otto (1963) noted that these family strengths were not isolated variables but rather were seen to form clusters "...which are dynamic, fluid, interrelated and interacting" (p. 336). He defined family strengths as, "...those forces and dynamic factors...which encourage the development of the personal resources and potentials of members of the family and which make family life deeply satisfying and fulfilling to family members" (Otto, 1975, p. 16).

Otto's continued work flowed into the human potential movement of the 1960's. Family strengths were often highlighted as important and untapped resources. Much of this work was aimed at helping families enrich their relationships in order to prevent future difficulties. Otto (1975) concluded his work with the belief that the family, as an institution, was in a state of evolution, and the introduction of the concept that the development of family potential is a major aim of the family throughout its life span was seen as offering new hope and a new vision of the family for the future.

<p>Herbert Otto, 1963</p> <ol style="list-style-type: none"> 1. Provision of physical, emotional, spiritual needs of family. 2. Sensitivity to needs of family. 3. Communicate effectively. 4. Provide support, security and encouragement. 5. Initiate and maintain growth producing relationships and experiences within and without the family. 6. Maintain and create responsible community relationships. 7. Grow with and through children. 8. An ability for self-help, and accept help when appropriate. 9. Perform family roles flexibly. 10. Mutual respect for individual family members. 11. The ability to use crisis as a means of growth. 12. A concern for family unity, loyalty, interfamily cooperation. <hr/> <p>Olson et al., 1983</p> <ol style="list-style-type: none"> 1. Accord. 2. Financial management. 3. Communication. 4. Satisfaction with family and friends. 5. Supportive social network. 6. Satisfaction with child rearing. 7. A positive appraisal of family life. 8. Satisfaction with the overall quality of their life. 	<p>Stinnett & DeFrain, 1985</p> <ol style="list-style-type: none"> 1. Commitment: dedication to promoting each other's welfare and happiness. 2. Appreciation: show appreciation for each other a great deal. 3. Communication: good communication skills and spend time talking with each other. 4. Time: spend quality time in great quantities with each other. 5. Spiritual Wellness: have a sense of a greater good or power in life and that belief gives them strength and purpose. 6. Coping ability: view stress or crisis as an opportunity to grow. <hr/> <p>Beavers, 1982</p> <ol style="list-style-type: none"> 1. A systems orientation. 2. Clear boundaries between the generations. 3. Contextual clarity 4. Hierarchy of power with leadership in the hands of the parents. 5. Encouragement of autonomy to develop sense of self. 6. Joy and comfort in relating to each other. 7. Skilled negotiation of necessary tasks. 8. Have a system of values and beliefs which transcend the limits of their experience and knowledge.
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Table 1: *Summary of Wellness Studies.* (Source: Beavers, 1982, p. 47-53; Olson et al., 1983, p. 215; Otto, 1963, p. 333-336; Stinnett & DeFrain, 1985, p. 14)

The most ambitious work to follow on family strengths has been conducted by Stinnett and his colleagues (Stinnett, Chesser, & DeFrain, 1979; Stinnett, Chesser, DeFrain, & Knaub, 1980; Stinnett & DeFrain, 1985; Stinnett, DeFrain, King, Knaub, & Rowe, 1981) who also obtained extensive information from families about the characteristics that define strong families.

Stinnett made three assumptions about strong families: they would have a high degree of marital happiness; they would have satisfying parent-child relationships; and family members would do a good job of meeting each other's needs (Stinnett & DeFrain, 1985). Stinnett and a team of student researchers contacted Home Extension agents and asked them to recommend families that seemed to fit the assumptions about strong families. A total of 130 families contributed information about their family life by completing the Family Strengths Inventory Questionnaire developed by Stinnett. By 1985, a total of 3000 families had formally contributed to family strengths research by completing the Family Strengths Inventory.

From this wealth of data, Stinnett and DeFrain (1985) developed their profile about strong families. In spite of cultural, political and language differences, strong families shared six major qualities. These included commitment, appreciation, communication, quality time, spiritual wellness and coping abilities (see Table 1).

Stinnett et al. (1979) noted that it was interesting that most of these qualities found to characterize strong families have been found to be lacking in families that are having severe relationship problems and in divorced families. He and his colleagues suggested these six qualities could provide direction for developing interventions which promoted stronger families. Williams, Lingren, Rowe, Van Zandt, and Stinnett (1985) provided a definition of family strengths concluded from the data:

Family strengths refers to those relationship patterns, interpersonal skills and competencies, and social and psychological characteristics which create a sense of positive family identity, promote satisfying and fulfilling interaction among family members, encourage the development of the potential of the family group and the individual family members, and contribute to the family's ability to deal effectively with stress and crisis. (Preface)

Stinnett and his colleagues' work contributed a great wealth of descriptive data to the study of families and their strengths. Like Otto's work, a wide variety of family variables were seen as beneficial to the study not as limiting the results' generalizability. Unlike

Otto's population, in which the criteria for inclusion was simply volunteer married couples, Stinnett and colleagues had more stringent criteria for inclusion in the study .

Further research by such notables as Lewis, Beavers, Gossett, and Phillips (1976) and Olson and McCubbin (1983) approached their studies of healthy family functioning and family strengths with a purpose of delineating theory about normal families.

The Timberlawn study of healthy families (Lewis et al., 1976) provided a unique opportunity to understand the patterns of relating found in competent families. This research presented volunteer families containing no identified emotionally ill member with a series of tasks; the work was filmed; and raters were trained to rate the families with process-oriented, interactional rating scales. This group was selected to match as closely as possible a group of families who had an adolescent hospitalized in a private psychiatric hospital. These families were studied in similar fashion (Beavers, 1977). The research shed light on the processes evolved by couples who develop healthy families and an optimal profile was developed. Table One lists the variables that optimal families showed capability in. These included a systems orientation, clear boundaries, contextual clarity, hierarchy of power, egalitarian coalitions, encouragement of autonomy, a joy and comfort in relationships, skilled negotiation and a system of values and beliefs (Beavers, 1982) [see Table 1].

The characteristics found in optimal families were presented as the highest level of a continuum of competence. These characteristics provided a framework from which to develop interventions to enable families to achieve greater degrees of competence. Some follow-up studies of the Timberlawn study suggested that competence at one point in a family's life is reasonably predictive of capability at a later date since, in follow-up, optimal families remained healthy over several years (Beavers, 1982). Beavers drew his definition of the healthy family from various sources:

...health is a process, and of growth, adaptation, and change as integral parts of getting and staying healthy....optimal families demonstrate those skills that are crucial in dealing with the tensions between individual choice and group needs, between the need for individual freedom and for belonging and togetherness....healthy families have defects and weaknesses...they are a part of health and part of the charm of any competent family. (Beavers, 1982, p. 45-66)

The Timberlawn study, with its approach of comparing competent families with less than competent families was valuable for its research sophistication. However, variables such as current stress, social class and environmental/community factors were not considered, although were acknowledged as possible 'impinging' factors on family functioning at any given time.

Olson, McCubbin and Associates (1983) undertook a national study of 1140 married couples and families to provide a panoramic perspective of normative family processes across the family life cycle. Family systems at seven stages of the family life cycle were systematically studied on five major theoretical dimensions: family types, family resources, family stress, family coping and family satisfaction. Olson and McCubbin were struck with the task of deciding whether family strengths were the same as family resources, or were they a smaller constellation of attributes encompassed by the broader term of resources. Otto (1963), Stinnett (1979) and Beavers (1982) took the approach of incorporating a variety of family attributes, combining behavioural and attitudinal dimensions interchangeably to define family strengths. After reviewing the literature, Olson and McCubbin were influenced by the work of Davis (1980) in which she identified family pride as a variable contributing to strengths. Family pride was defined as the individual's perception that her or his family was a worthy group (Davis, 1980). Davis's work supported the idea of narrowing the definition of family strengths to a constellation of attributes that are part of a family systems' internal resources. Davis (1980) study concluded that family pride is related to other measures of family strengths

and that clinical families demonstrated lower scores on a family pride scale than did nonclinical families. Family resources came to include both marital and family strengths. Olson and McCubbin (1983) developed family strengths to include family pride and accord, parent-adolescent communication and congregational activities. Family pride focused on loyalty, optimism, and trust in one's family. Family accord dealt with feeling able to accomplish tasks, deal with problems and get along well together (Olson and McCubbin, 1983).

One of the categories of families that was studied that is most relevant to this study was the Low-stress Families with Young Children. Table 1 lists the important resource characteristics necessary for success at this stage, including accord, financial management, communication, satisfaction with family and friends, a supportive social network, satisfaction with child rearing, a positive appraisal of family life and satisfaction in the overall quality of family life (Olson & McCubbin, 1983) [see Table 1].

Olson and McCubbin's (1983) study discovered that marital and family strengths were very significant. Couples and families possessing these strengths seemed to function more adequately across the life cycle. This is similar to Beaver's suggestion that competence at one point in a family's life is reasonably predictive of capability at a later date. These families also tended to be more satisfied with their marriages and family lives. These strengths seem to operate as major buffers or resistors to stressful life events. It could also be inferred that having these strengths helped these families deal more effectively with the stress and changes that occur across the life cycle. High levels of marital and family strengths might serve a significant preventative function for families. Through the course of their work, Olson and McCubbin (1983) redefined family resources to include marital strengths, family strengths, coping strategies and

resources in an effort to determine which of these variables are critical in facilitating family adjustment and adaptation to family life changes.

Like Otto twenty years earlier, Olson and McCubbin (1983) were motivated to explore normal family functioning in order to provide some balance to the existing family literature guided by research on why families fail. Their study assumed that families who have overcome individual and family crisis will help us understand important skills and resources for families to succeed. The literature suggests that families who work to develop strengths, coping strategies and basic resources will in the long run be more resistant to stressors and more resilient in the face of distress.

In summary, the 'wellness' studies served a purpose in providing descriptive data and generating theory about the 'typical' family. It provided the normative data against which families with children with disabilities were measured. To a great extent, the research on families with disabilities has been problem-oriented, documenting only adverse effects the handicapped child has on the family unit. It is important to summarize this data in order to gain an appreciation for the recent theoretical shift to viewing families with handicapped children as competent as opposed to deficit. The competency approach signals a re-examination of the wellness studies' data to understand why families may respond to the care of a child with handicaps with resilience and adaptive functioning (Trivette et al., 1990).

Deficit Studies

As stated previously, the second area of research in families with a child with a disability was intent upon identifying the problems within these families. This deficit approach documented only adverse affects the child with a disability has on the family unit within the frameworks of mourning, stress and family dysfunction (Hanline, 1991). A third area of research emerged alongside the deficit studies as a result of the

inconclusive empirical data with regard to family, marital and individual dysfunction as inevitable consequences within families with a child with a disability (Van Riper, Ryff, & Pridham, 1992).

Conceptualizing parental reactions to the birth of a handicapped child as a grief process with predictable stages was the prevalent view within the professional literature (Wikler, 1981). The primary cause for the grief at the time of diagnosis was considered to be the loss of the fantasized normal child (Kennedy, 1970). The general theme was that there were, at the very least, three stages of adjustment that parents of a handicapped child experience (Turnbull & Blacher-Dixon, 1980). The first stage is shock and denial, in which parents refuse to acknowledge the reality or at least the extent of their child's delay in an effort to believe that a cure or magical intervention will prevent any lifelong problem. Although parents may eventually achieve intellectual awareness of the problem, reactions such as anger, disappointment, grief or guilt still occur. These reactions characterized the second stage of emotional disorganization. The stage of emotional adjustment typically represents a constructive adaptation to the child's handicap and realistic expectations of his or her progress.

Olshansky (1970) presented a different view--a clinical picture of the repeated sadness experienced by parents of retarded children. He suggested an alternative conceptualization of the grief process for parents with handicapped children. Many parents feel the need to adjust continually to the demands and changing needs of their handicapped child. Acceptance may be a more fluid concept better stated as chronic sorrow. He coined the term 'chronic sorrow', referring to a long-term internalization of a depressive mood responding in an understandable, non-neurotic manner to a tragic fact. Many parents do not reach one ideal level of acceptance of the handicapped child but

rather they experience periods of acceptance and sorrow throughout the years of coping with their child (Olshansky, 1970).

An increasing number of clinicians are listening to and supporting the perspective voiced by Olshansky (1970) and research is supporting the concept that adjustment of parents of children with disabilities is one of chronic sorrow rather than a time-bound, stage process (Damrosch & Perry, 1989; Wikler, 1981).

... there are predictable periods when grieving will be reactivated, periods of developmental and transitional crises, in which culturally assumed enactment of parental roles are not fulfilled. When major discrepancies from these expectations occur, most parents will again experience the grieving that they felt at the time of diagnosis. (Wikler, 1981)

In Wikler's et al. (1981) study of parents with retarded children, she posed the questions that both professionals and parents need to determine which of the two adjustment patterns is more reflective of the mentally retarded children's parent's experience. If grief is time-bound, the parents who do not adjust at the end of the stages may be identified as dysfunctional, whereas the chronic sorrow view is a natural response to a tragic fact. The professional perception of the parents and the parents' perception of self will be affected by choice of view, and subsequently, overall family adjustment.

The early research on stress in families with handicapped children had a pathological and/or maladjustment conceptualization that assumed the presence of a child with disabilities with parental stress and family dysfunction (Farber, 1959).

Researchers have found that families of children with disabilities tend to report more stress than families of nondisabled children (Beckman, 1991; Dyson, 1991, 1993; Friedrich & Friedrich, 1981; Kazak & Marvin, 1984; McKinney & Peterson, 1987). Two studies will serve to highlight this position which used the Questionnaire on Resources

and Stress; the long form by Friedrich and the short form by Dyson to measure the stress variable. The earlier study by Friedrich and Friedrich (1981) concluded that the group of parents who had handicapped children reported less psychosocial assets to help ameliorate the continual impact of this stress (ie., less satisfactory marriage, less social support, less religiosity, and less psychological wellbeing). A more recent study by Dyson (1991) concluded that caring for a child with handicaps is associated with parental stress as compared to families with nonhandicapped children in the domains of caretaking, pessimism and child limitations. Dyson's follow-up (1993) study showed that over time families of children with disabilities experienced increased stress relating to parent and family problems in the care of the child and parental pessimism over the child's future.

As stated previously, the effects of a child with a disability on family functioning remains inconclusive in the research (see Table 2). Some investigators have reported that parents of children with disabilities experience a wide variety of negative outcomes including higher levels of depression (Cummings, Bayley, & Rie, 1966); increased social isolation (Featherstone, 1980); less satisfactory social supports (Friedrich & Friedrich, 1981); and less psychological wellbeing (Sloper & Turner, 1993; Waisbren, 1980). Other investigators have reported no significant differences between parents of children with disabilities and parents of nondisabled children on measures of depression (Gowen et al., 1989); marital satisfaction (Kazak & Marvin, 1984); social supports (Dyson, 1986); overall family functioning (Dyson, 1991; Trute, 1990). In fact, a few researchers have suggested that the presence of a child with a disability brings the child's parents and the family as a whole closer together (Abbot & Meredith, 1986).

It is important to examine the contradictory results of the research in more detail. Ramey, Krauss and Simeonsson (1989) note:

Variables	Grief		Stress		Marital Satis.		Social Sup.		Religiosity		Depression		Family Func.		S. E. S.		Child's Dis.	
	Stages	Chronic Sorrow	No Assoc.	Increase	Satisfied	Less Satisfied	Less	Satisfied	No Assoc.	Assoc.	No Assoc.	Increased	Less	Satisfied	No Assoc.	Assoc.	No Assoc.	Assoc.
Farber, 1959	✓									✓ ₊								
Cummings et al., 1966												✓						
Gowen et al., 1989											✓					✓		✓ ₋
Olshansky, 1970		✓																
Turnbull et al., 1980	✓																	
Waisbren, 1980							✓		✓			✓						
Friedrich, 1981				✓		✓	✓			✓ ₋		✓						
Wikler, 1981		✓																
Kazak & Marvin, 1984				✓	✓			✓										
Dyson & Fewell, 1986				✓				✓										✓ ₋
McKinney & Peterson, 1987				✓														✓
Damrosch, 1989		✓																
Trute & Harch, 1988					✓			✓						✓	✓		✓	
Beckman, 1991				✓													✓	
Dyson, 1991, 1993				✓										✓		✓		✓ ₋
Sloper & Turner, 1993												✓				✓		✓ ₋
Van Riper, 1992					✓						✓			✓				

Table 2: *A Sampling of Studies Indicating Contradictory Findings.*

Despite the accumulation of numerous interesting details, the inconsistent description across studies of even the basic characteristics of families, children, and environments prevents organizing the findings around major classes of variables and constructs. In fact, the state of the research can support only the general confirmation that: a) many parent, child and ecological variables are intercorrelated and b) not all investigators find that particular variables are associated with particular outcomes (and the reasons for the differences cannot be elucidated!). (p. iv)

Glidden (1993) believes the state of research on families rests in contradictions because the notion persists that a family with a child who has a disability is a family with a disability. She states this persistence has continued despite substantial methodological problems with the research on which the belief is based. Of prime importance are the instruments used to measure family stress and functioning of the study population. These instruments have usually operationalized pathology as stress (Glidden, 1993), and the instruments used to measure stress are based on stress research conducted with families who do not have a child with disabilities (Innocenti, Huh, & Boyce, 1992). Cautions are frequently raised in employing stress norms to families who have a child with disabilities (Abidin, 1990), but in practice are frequently used. It is not surprising that higher stress levels have almost always been found in families with children who have disabilities in contrast to those with children who do not have disabilities, thereby supposedly confirming the belief of a dysfunctional family (Glidden, 1993). There is a need to assess both positive and negative outcomes on multiple levels (ie., family, marital and individual) and to continue to develop new and/or refine existing instruments that will reflect the coexistence of positive and negative outcomes of parenting a child with a disability.

The existing deficit based studies are also limited by other methodological flaws including a lack of comparison groups (Beckman, 1983; Friedrich, 1979; McKinney & Peterson, 1987; Sloper & Turner, 1993) and almost exclusive reliance of results from mothers (Beckman, 1983; Dyson, 1991; Friedrich, 1979; McKinney & Peterson, 1987).

An additional problem with the deficit view is more theoretical in nature. Wikler et al. (1983) suggest the deficit approach may be detrimental for two reasons. Their arguments purport that families may have more successes than failures in dealing with their children, and by looking for problems within the families of special needs children, the researcher may unknowingly direct attention away from potential positive outcomes. Also the researcher may create the milieu that he or she assumed existed. This can come about as a result of insufficient reinforcement being provided to families for exhibiting coping behaviours because of a focus directed exclusively on the negative. In the past, when parents insisted on mentioning their strengths, such as by pointing out that they had benefited from the challenges presented by caring for a special needs child, experts would often interpret these reactions as defensive, denial or overcompensation (Wikler et al., 1983). When research findings yielded unexpected results about family strengths, authors have discounted these findings as being caused by methodological flaws and therefore, not producing significant results (Friedrich & Friedrich, 1981).

In summary, the contradictions that the research on families with a child with a disability generated have served as a turning point for reexamining both the theoretical and methodological underpinnings of the field. As a result, individual and family strengths have begun to be studied (Dunst, Trivette, & Deal, 1994) and researchers are exploring coping, adaptation and benefits when there is a child with disabilities in the family (Abbot & Meredith, 1986; Dyson, 1991; Erikson & Upshur, 1989; Van Riper et al., 1992).

Strengths Studies

As stated previously, this alternative perspective that views families with children with disabilities as successful family systems positively adjusted to the family crisis as a

result of existing strengths arose in response to the literature's consistent focus on the problems, stresses and inadequacies of families with children with disabilities.

The most recent and notable work in the area of family strengths began in the late 1980's by a group of early intervention researchers headed by Dunst and Trivette. They developed a model of practice that can be used for identifying and building upon family strengths as the principle way of supporting and strengthening family functioning (Dunst et al., 1994). These authors acknowledge that strength-based assessment and intervention practices represent a significant change for human services practitioners. "Much of the social work literature on practice with families continues to use treatment, dysfunction and therapy metaphors and ignores work on family strengths developed in other disciplines. Deficit, disease and dysfunction metaphors are deeply rooted in social work" (Cowger, 1993, p. 262). The focus of assessment has "continued to be, one way or another, diagnosing pathological conditions" (Rodwell, 1987, p. 235). A family strengths approach to working with families challenges professionals to rethink the ways in which families with and without handicapped children are viewed and engaged in helping relationships. This 'cutting edge' perspective of family strengths provided by Dunst and his colleagues' work warrants a closer explication of the components of their model of practice.

Principles of Family Strengths Approach to Families

The paradigmatic shift demanded by the strengths perspective proposes a positive, proactive approach toward the family including consideration of the following tenets:

It must be recognized that all families have strengths and that these strengths are unique and depend upon the family's beliefs, cultural background, ethnicity, socioeconomic background, and so forth...

...the failure of a family or individual family member to display competence must not be viewed as a deficit within the family system or family member, but rather

the failure of social systems and institutions to create opportunities for competencies to be displayed or learned...

...work with families must be approached in ways that focus and build on the positive aspects of functioning, rather than seeing families as being 'broken' and 'needing to be fixed'...

...a shift must be made away from the use of either treatment or prevention models toward the adoption of promotion and enhancement models which are more consistent with the aim of strengthening family functioning...

...the goal of intervention must not be seen as 'doing for people' but rather the strengthening of functioning in ways that make families less and not more dependent upon professionals for help...

(Dunst et al., 1994, p. 116-177)

Collectively, these principles suggest an alternative to the deficit, reactive approach that has dominated assessment and practice in the human services fields, including social work. They also embody the philosophy of empowerment which aims to strengthen functioning by enhancing competencies and a sense of control over important aspects of one's life (Rappaport, 1981). Personal empowerment recognizes the uniqueness of each client. Promoting empowerment requires a belief that people are capable of making their own choices and decisions (Cowger, 1994).

Major Components of Family Strengths

Following a review of the family strengths literature, Dunst and his colleagues suggested that family strengths were comprised of three, nonmutually exclusive sets of cognitive, attitudinal and behavioural components: family values, family competencies and family interactional patterns. Figure 1 shows a way of conceptualizing how family values, competencies and interactional patterns make up family strengths, and how the unique combination of strengths defines a family functioning style (Dunst et al., 1994).

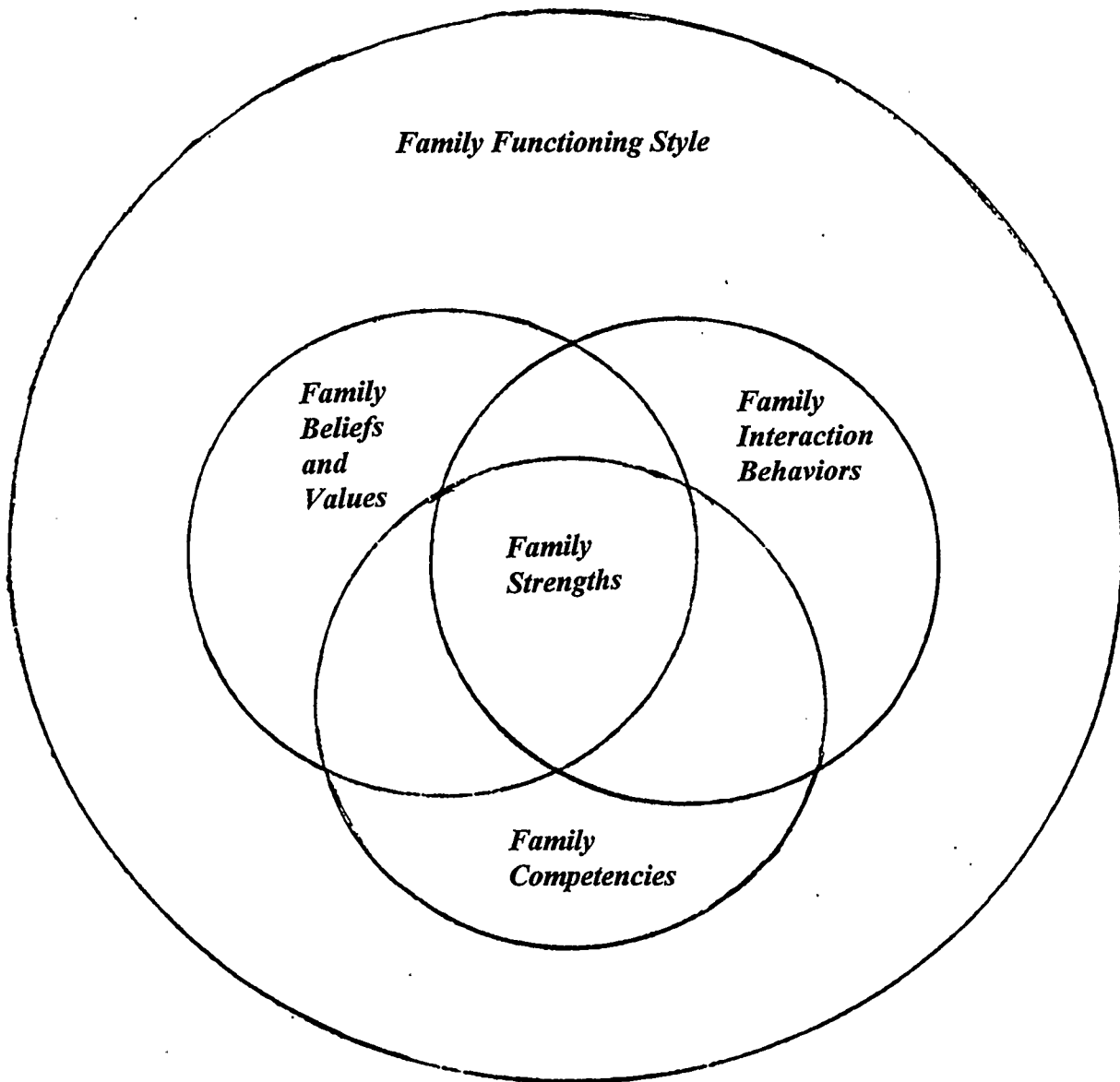


Figure 1: *A Model for Conceptualizing the Key Elements of Family Functioning Style.* (Source: Dunst et al., 1994, p. 119)

“Family values refer to the interrelated and interacting influences of attitudes and beliefs that contribute to a family's unique functioning style. Family competencies refer to the knowledge, skills, capabilities, capacities and abilities that individual family members and the family unit have at their disposal in order to mobilize internal and external resources. Interactional patterns refer to those characteristics of interpersonal family relationships that promote the flow of information and resources among family members in ways that are mutually supportive. (Dunst et al., 1994, p. 118-119)

Characteristics of Family Strengths

No family is characterized by the presence of all of these values, competencies or interactional patterns. A combination of qualities appears to define strong families, with certain combinations defining unique family functioning styles. Dunst et al. (1988) following their synthesis of the family strengths literature suggest that there are a number of nonmutually exclusive qualities of strong families. The selection of these characteristics were highly influenced by the researchers cited in the Wellness Studies of this literature review including Otto (1962), Stinnett et al. (1979, 1985), Lewis et al. (1976) and Olson et al. (1983). The characteristics of family strengths are shown in Table 3. These characteristics were the basis of the development of the Family Functioning Style Scale that is used in this research study (Deal, Trivette, & Dunst, 1988; Trivette, Dunst, Deal, Hamby, & Sexton, 1994). To date, the findings of a study to establish the reliability and validity of the FFSS (Trivette et al., 1994) support the conceptual framework upon which the scale was developed. More utilization of this measurement scale in research is yet to come.

There has been other research specifically seeking strengths in families with a child with a disability utilizing other conceptual models and measurement instruments. Some of the strengths characterized in these studies included increased family unity (Abbott & Meredith, 1986); utilization of social supports (McCubbin, 1989; Trute & Hauch, 1988), including religious affiliation (Abbott & Meredith, 1986); strong marital relationships (Abbott & Meredith, 1986; Trute & Hauch, 1988); and, successful coping strategies (Trute & Hauch, 1988). These characteristics confirm those proposed by Dunst et al. (1994).

<p>Family Values</p> <ol style="list-style-type: none"> 1. A belief and sense of commitment toward promoting the wellbeing/growth of individual family members and the family unit; 2. A clear set of family rules, values and beliefs that establishes expectations about acceptable and desired behaviour. 3. A sense of purpose that permeates the reasons and basis for 'going on' in both bad and good times; 4. A sense of shared responsibility. 5. Respect for the privacy of others. 6. A strong sense of family rituals and traditions. 7. A belief in the importance of being active and learning. 8. The belief that things will work out for the better if the family works together. 9. A concern for family unity and loyalty. 	<ol style="list-style-type: none"> 6. Knowledge and skills used to take action to mobilize needed resources and supports. 7. Ability to be positive and see the positive in almost all aspects of their lives, including the ability to see crises and problems as a opportunity to learn and grow. 8. Ability to mobilize family members to acquire resources. 9. Ability to initiate and maintain growth producing relationships within and outside of the family. 10. Ability to plan ahead to make things happen that are important to the family. 11. Ability to use-humour to deal with the events of their lives.
<p>Family Competencies</p> <ol style="list-style-type: none"> 1. A varied repertoire of coping strategies that encourage positive functioning in dealing with life events. 2. Flexibility and adaptability in the roles necessary to procure resources to meet needs. 3. A balance between the use of internal/external family resources for coping/adapting to life events and planning for the future. 4. Knowledge and skills used to recognize concerns, identify needs and specify desired outcomes. 5. Knowledge and skills used to identify sources of support and resources for meeting needs. 	<p>Interactional Patterns</p> <ol style="list-style-type: none"> 1. Congruence among family members regarding the value and importance of assigning time and energy to what the family considers its goals, needs, projects and functions. 2. The expression of appreciation for the small and large things that individual family members do well, and encouragement. 3. Concentrated effort to spend time and do things together, no matter how formal or informal the activity or event. 4. Communication with one another in a way that emphasizes positive interactions among family members. 5. Engaging in collective problem-solving activities designed to evaluate options for meeting needs and procuring resources. 6. Listening to one another's problems, desires, hurts, aspirations, fear and hopes in a supportive manner. 7. Expressions of affirmation and support of individual family members.

Table 3: Characteristics of Family Strengths. (Source: Dunst et al., 1994, p. 120-121)

In summary, the strengths approach to working with families with and without children with disabilities is still in a beginning stage of theory, research and practice development, although significant advances have been made, most notably by Dunst and his colleagues. As stated previously, Dunst and his colleagues' conceptual model utilizes several components of the wellness studies presented earlier. Their practice model embodies the concept of empowerment and enablement, which permits families with special needs children the possibility of better adaptation to both normal life events and life crisis. On the basis of the review of the literature, it was determined that the theoretical and practice approach of supporting and strengthening families, as exemplified in the work of Dunst and his colleagues, was most appropriate for providing the conceptual framework for the research studies.

Summary

Chapter Two has offered review of the literature in regard to family strengths in general, and family strengths in families with a child with a disability in particular. The evaluation of the research in this area has been categorized into several phases: the wellness studies; the deficit studies; the studies which targeted the inconsistencies in the deficit studies, and introduced the concept of moderating influences upon a family's adjustment to a child with disabilities; and the strengths studies. The theoretical framework of the strength studies provides the conceptual basis of research study. In the following chapter, consideration is given to the method of research that was used to further explore the family strengths in families with young handicapped children and nonhandicapped children.

CHAPTER THREE

METHODOLOGY

This chapter presents the method of research design that was utilized to explore the strengths of families with and without handicapped children. The chapter begins with a statement of the purpose, research question and hypothesis of the study and is followed by a description of the research design; a review of the sample selection; an outline of the data collection procedure; a description of the measurement tools; a commentary on the limitations of this study; and, finally a discussion of the ethical considerations in the study.

Questions and Hypotheses

The purpose of this study was to compare the strengths in families of handicapped children with the strengths in families without handicapped children. As was noted in the introduction viewing families with handicapped children as having unique strengths is beginning to receive research attention (Dunst, Trivette, & Deal, 1988; Dyson, 1991; Sloper & Turner, 1993).

Emerging from the purpose of this study, the research questions were stated as follows: first, what are the strengths of families with handicapped children and second, are these strengths unique, different or the same for families without handicapped children?

Following from the research questions, it was hypothesized that families with handicapped children would show different strengths than did families without handicapped children. The null hypothesis states that no difference would be found in strengths between families with handicapped children and families without handicapped children.

Research Design

This study utilized quantitative research methods. Quantitative research methods are generally used when extensive prior knowledge exists about the subject of the study (Grinnell, 1988). As the literature review explicates, families with handicapped children have been subject to various forms of research for several decades and there is a rich body of information that has increased our knowledge base (Dunst et al., 1988). Quantitative studies often require ease of access and a high level of legitimation because their methods of data collection are usually intrusive. They also require a high degree of control and authority in order to safeguard the research design (Grinnell, 1988). In this study, the researcher's professional affiliation with the sample groups facilitated ease of access and legitimation despite the intrusiveness of the data collection methods and assisted to a lesser degree, with maintaining contextual control and authority. Considerable conceptual development (Otto, 1963; Stinnett & DeFrain, 1985), theory construction (Dunst et al., 1988; Olson et al., 1983), and testing (Dyson, 1989; Hanson, 1990; Innocenti et al., 1992) was achieved with the subject under study and thus, met another guideline of using quantitative methods of research (Grinnell, 1988). Finally, quantitative methods are best suited in trying to establish cause-effect relationships between variables or to describe relatively straightforward characteristics such as demographic variables. This study described and compared characteristics of the study population, which included the demographic items of gender, age, marital status, family size, income, religious affiliation and education of the primary caregiver; the gender, age, diagnosis and severity of disability of the handicapped child; and, the family functioning style of families with and without a child with special needs.

A descriptive survey design was utilized with a comparison group to examine the characteristics of families with handicapped children and families with nonhandicapped

children. The main purpose of a descriptive survey is to find out the distribution of certain attributes among a sample of respondents (Grinnell, 1988). This purpose is consistent with the purpose of this study which has already been stated as discerning family strengths. Including a comparison group is an attempt to address methodological critiques in the literature (Dyson, 1991). The families with handicapped children were selected from the Pediatric Neuromuscular Unit and met the requirement of living with a child with a handicapping condition of age seven or less. The families with nonhandicapped children were recruited from the Children's House Child Care Society and met the requirement of living with a child of age seven or less. The data collected concerned general demographic characteristics of the families, as well as completion of the Family Functioning Style Scale which provides information about a family's perceived strengths. The data was collected between January, 1994 and April, 1994 through mailed, self-administered questionnaires. Self-report methodologies make important contributions to knowledge by allowing insiders a glimpse into the attitudes, feelings and perceptions of family members (Blacher, 1984). However, there are limitations with this methodological approach, mainly the risk of distortion of the data due to participants providing socially desirable responses on the measurements to create a favourable impression of themselves (Stoneman & Brody, 1984). To offset the possible impact of the socially desirable response set, the researcher impressed upon these participants the importance of answering questions honestly.

Population and Sample

In this study, the population was comprised of all those families who lived with a child under seven years of age who had a handicapping condition, within the geographical boundaries of the Lethbridge, Chinook and Barons/Eureka/Warner Health Unit districts.

The sample population consisted of volunteer participants recruited from the current clients of the Lethbridge Regional Hospital, Pediatric Neuromuscular Unit and clients of The Children's House Child Care Society. Data on handicapped children was drawn from the former agency and data on nonhandicapped children from the latter agency.

The Pediatric Neuromuscular Unit provides multidisciplinary outpatient therapy services at the Regional Hospital and ongoing outreach treatment and consultation services to the child's home and community educational programs. The multidisciplinary team consists of a physiotherapist, occupational therapist, speech and language pathologist and social worker. As noted previously the geographical area served by the program consists of the City of Lethbridge Health Unit, Barons-Eureka-Warner Health Unit, and the Chinook Health Unit within Southwestern Alberta. The client group consisted of children and youth from birth to eighteen years (18) of age. The identified medical condition was a neuromotor or neurological disorder resulting in physical and/or mental disabilities (ie. cerebral palsy, spina bifida, muscular dystrophy).

The Children's House Child Care Society is a non-profit, parent board society offering a full range of child care options by a professionally trained staff group. These options include a Daycare Centre offering full- and part-time care; a licensed Early Childhood Services program, and an integrated program for children with special needs. The day care is offered from 7:00 a.m. to 6:00 p.m. Monday through Friday for children aged 19 months to six years. The Society also offers a Satellite Day Home Program with regular and extended hours for children from birth to 12 years of age. Full- and part-time care is available, as well as out of school care and a parent relief program on a drop in, arranged ahead basis.

Lethbridge has only two agencies which serves the developmentally delayed population. The Pediatric Neuromuscular Unit was chosen for this study because the

client group met the requirements of age and disability necessary for the study. The researcher has a professional association with the unit allowing greater feasibility of access to the subjects. A comparable group of children (ie., age) were available through the Children's House Child Care program and the researcher's professional involvement with this program again provided access to the subjects. It is recognized that the possible effects of nondeliberate researcher bias needs to be addressed due to my professional involvement with the sample population. Many persons who are emotionally involved with the topic of their research will not deliberately bias their research. However, a strong likelihood of bias exists because individuals may unconsciously slant their work in a hundred different ways and thus, reviewing the research design for unconscious bias is necessary (Borg & Gall, 1989).

One strategy for reviewing the research design for unconscious bias is to have the design checked by other researchers/colleagues for omissions or unconscious bias (Borg & Gall, 1989). A social work colleague of the researcher from the Lethbridge Regional Hospital reviewed the research design. It was her opinion that the design of this study, including the statistical analysis of the data regarding family strengths, would adequately address any concerns regarding nondeliberate researcher bias.

Sampling Procedure

Sampling involves the selection of a portion of a population as representative of the population. Probability and nonprobability are the two categories of sampling procedures. In probability sampling, every member of a population has a known probability of being selected for the sample, so it can be established that the sample is representative of the population from which it was drawn (Grinnell, 1993). To help ensure that the sample is representative, the ideal solution which is difficult to achieve, is to select a random sample from the target population. A random sample is one in which

each individual in the defined population has an equal chance of being included (Borg & Gall, 1989). Simple random sampling was beyond the scope of this study primarily due to the lack of financial and political resources to compile an adequate sampling frame from which to select a sample. A nonprobability sampling procedure was chosen knowing that the probability of selection cannot be estimated, therefore, there is little or no support for the claim that the sample is representative from the population. Convenience sampling which relies on the closest and most available subjects to constitute the sample was used in regards to the Pediatric Neuromuscular Unit and the Children's House Child Care Society agencies. It was recognized that the families in these two agencies may differ in important ways from families receiving services elsewhere in regards to the study variables and thus, the data generated may be rich but the opportunity to generalize to other populations is limited. Also, a consideration of quota sampling was used in that it was important to identify a variable that was relevant to the study, mainly age of seven or under for the handicapped children and comparison group, and thus, a potential participant list was compiled with this quota in mind (Grinnell, 1993). Finally, the research drew upon a volunteer sample and it was known that volunteer subjects are likely to be a biased sample of the target population since volunteers have been found to be different from those who choose not to volunteer (Borg & Gall, 1989).

Contact with the two agencies was initiated by the researcher through an interview with the Directors, outlining the research endeavour and requesting their participation. The attached INFORMED CONSENT FORMS signed by the Directors of each agency indicated their support of the research endeavour (see Appendices A and B). The potential participant list from the Pediatric Neuromuscular Unit was 40 families and the Children's House Child Care Society consisted of 40 families. It should be noted

therefore, that the sample was not randomly selected which affects the generalizability of the results.

Data Collection Procedures

The data collection process proceeded through three phases to maximize the participant response rate. The final results indicated a 65 percent return rate for families with a handicapped child and a 32 percent return rate for families without a handicapped child. As stated, client file data was accessed in both agencies for names and addresses of children seven years of age and under in order to compile a potential participant list.

In the first phase, the 40 families identified within the Pediatric Neuromuscular Unit were contacted by letter outlining the research endeavour and requesting their participation (see Appendix C). A SUMMARY OF THE STUDY (see Appendix D) was included and they were asked to complete an INFORMED CONSENT FORM (see Appendix E) and return it in the enclosed stamped envelope if they wished to participate in the study. This initial mailing took place on January 8, 1994.

By January 20, 1994, 20 consent forms had been returned. A follow-up phone call to all subjects who returned the INFORMED CONSENT FORM included a discussion of the purpose of the study, a description of what was expected from the consumer in terms of time commitment and types of information needed, an explanation on the voluntary nature of their participation, and a written and verbal guarantee of confidentiality was provided (see Appendix E). At this time, the potential participant was advised that they would receive in the mail a letter acknowledging their participation in the study (see Appendix F), along with the measurement package (see Appendices G, H and I). Instructions for completion of the measurement package were included as well as a stamped envelope for return of the completed measurement package. By the week of February 14, 1994, 11 measurement packages had been returned. The nine outstanding

families were telephoned, with seven measurement packages subsequently being returned. From this group two participants did not return the measurement package.

The second phase of the data collection consisted of targeting the 20 families who did not return consent forms. These families were mailed a second letter at the end of February, 1994, requesting they reconsider participating in the study (see Appendix J), a SUMMARY OF THE STUDY (see Appendix D), an INFORMED CONSENT FORM (see Appendix E), the MEASUREMENT PACKAGE (see Appendices G, H and I) and a stamped return envelope for the completed package. The third phase of the data collection process was conducted by telephone calls. Through the week of March 21, 1994, telephone calls were made with success (meaning the phone was answered by a person) to 10 families to enlist their assistance in returning the completed measurement package. Of these 10 families, eight returned the measurement package by the end of April, 1994. No further efforts were made to increase responses because of time limitations for the researcher. The total response rate for the participants from the Pediatric Neuromuscular Unit was 26 out of 40 or 65 percent.

The data collection process for the participants from the Children's House Child Care Society proceeded similarly to the participants from the Pediatric Neuromuscular Unit. In the first phase, the 40 families identified within the Children's House Day Care Setting were contacted by letter outlining the research endeavour and requesting their participation (see Appendix C). A SUMMARY OF THE STUDY (see Appendix D) was included and they were asked to complete an INFORMED CONSENT FORM (see Appendix E) and return it in the enclosed stamped envelope if they wished to participate in the study. This initial mailing took place on January 10, 1994.

By January 20, 1994, 10 consent forms had been returned. A follow-up phone call to all participants who returned the INFORMED CONSENT FORM included a discussion

of the purpose of the study, a description of what was expected from the consumer in terms of time commitment and types of information needed, an explanation on the voluntary nature of their participation, and a written and verbal guarantee of confidentiality was provided (see Appendix E). At this time, the participant was advised that they would receive in the mail a letter acknowledging their participation in the study (see Appendix F) along with the measurement package (see Appendices G, H and I). Instructions for completion of the measurement package were included as well as a stamped envelope for return of the completed measurement package. By the week of February 21, 1994, seven measurement packages had been returned. There was no response by the three outstanding families and subsequently, no return of the measurement package.

The second phase of the data collection consisted of targeting the 30 families who did not return consent forms. A public notice (see Appendix K) was placed at the Children's House Day Care on the parents' information board. The 30 families were also mailed a second letter at the beginning of March, 1994 requesting they reconsider participating in the study (see Appendix L), a SUMMARY OF THE STUDY (see Appendix D), an INFORMED CONSENT FORM (see Appendix E) and, the MEASUREMENT PACKAGE (see Appendices G, H and I) and a stamped return envelope for the completed package.

The third phase of the data collection process was conducted by telephone calls. Through the week of March 28, 1994 telephone calls were made with success (meaning the phone was answered by a person) to 12 families to enlist their assistance in returning the completed measurement package. Of these 12 families, six returned the measurement packages by the end of April, 1994. No further efforts were made to

increase responses because of the time limitations of the researcher. The total response rate for participants from the Children's House Child Care Society was 13 out of 40 or 32 percent.

Measurement Tools

The measurement package included the: 1) INFORMATION ON PRIMARY CAREGIVER QUESTIONNAIRE; 2) the INFORMATION ON CHILD IN FAMILY WITH DISABILITY QUESTIONNAIRE that were developed by the researcher, and 3) the FAMILY FUNCTIONING STYLE SCALE developed by Deal, Trivette and Dunst (1988). The Family Functioning Style Scale (FFSS) was used to measure the dependent variable of Family Strengths. The Information on Primary Caregiver Questionnaire and Information on Child in Family with Disability Questionnaire was used to measure the descriptive variables. The following discussion is a description of and rationale for the questionnaires developed by the researcher; of the Family Functioning Style Scale and reasons for its selection in this study, as well as some discussion of others scales considered.

The review of the literature indicated several demographic characteristics which were seen to have some influence on positive adaptation for families with a handicapped child. It was necessary to develop two questionnaires which would address the characteristics deemed pertinent to this study. A questionnaire which would illicit information from the primary caregiver regarding age, gender, marital status, religious affiliation, income level, educational level and number of children was not found in the existing literature. Therefore, the Information on Primary Caregiver Questionnaire was designed following guidelines suggested by Norusis (1988). The INFORMATION OF CHILD IN FAMILY WITH DISABILITY QUESTIONNAIRE was modeled after Trute's Disability Index

(1990) [see Appendix P], but was modified to include only age, gender, diagnosis and severity of disability characteristics.

In designing the two questionnaires the principles of measurement validity and reliability were considered in order to minimize the amount of measurement error in the responses of individuals (Grinnell, 1993). These included the ability of the instrument to actually and accurately measure the concept being studied; and, the ability of the individual responses to be generalized to the larger population. It was recognized that validity and reliability of the instruments was not established and therefore caution must be used in generalizing results of the study to the larger population.

The INFORMATION ON PRIMARY CAREGIVER QUESTIONNAIRE is a form developed by the researcher to be completed by the person in the family who takes primary responsibility for the child(ren) in the home, including the child with a handicapping condition. General demographic information such as age, sex, family size and education is requested. The variables of marital status, religion and annual income were chosen in response to research findings which suggested that these variable have an impact upon positive adaptation in families with handicapped children (Crnic et al., 1983; Dyson, 1986; Friedrich, 1981; Trute, 1988).

The INFORMATION ON CHILD IN FAMILY WITH DISABILITY is a form developed by the researcher to be completed by the primary caregiver. It includes the four variables of age, sex, diagnosis, and severity of disability, all of which have been studied by other researchers to determine their impact upon positive family adaptation (Beckman, 1983; Sloper, 1993; Trute, 1990). The variable of severity of disability was measured using a Disability Index (Trute, 1990), incorporated into the questionnaire as Question Five. The four item Disability Index was created to assess the degree of physical and mental incapacitation in children ($\alpha = .77$). Parents were asked to

report their child's level of disability for degree of intellectual impairment, physical disabilities, need for ongoing medical attention and need for physical assistance through the course of their lives. Each item is rated on a four point rating scale by noting the degree to which the four statements apply to the child from, “No need/not at all” to “Severely/constant” (Trute, 1990).

The third questionnaire, the FAMILY FUNCTIONING STYLE SCALE (Deal, Trivette, & Dunst, 1988) is a scale including 26 items and was designed to assess 12 qualities of strong families: commitment, appreciation, time, sense of purpose, congruence, communication, role expectations, coping, problem solving, positivism, flexibility and balance. The instrument was developed as part of a family-centred assessment and intervention model that evolved from efforts to intervene in ways that support and strengthen family functioning. The scale assesses the extent to which an individual family member, or two or more family members, believes her/his family is characterized by different strengths and capabilities. Each item is rated on a five-point rating scale by noting the degree to which the 26 statements are “Not-At-All-Like My Family” to “Almost-Always-Like My Family”. The scale items are subsequently organized into three major categories of the family strengths: family identity, information and sharing, and coping/resource mobilization. Family identity includes the qualities of commitment, appreciation, time, purpose and congruence. Information and sharing includes the qualities of communication and role expectations. Coping/resources mobilization includes the qualities of coping, problem solving, positivism, flexibility and balance.

A large scale study is currently being conducted with the Family Functioning Style Scale to establish its reliability and validity and examine the characteristics of family strengths among different groups of families with preschool-aged children who complete

the scale under different conditions (ie. mother completed versus mother and father completed).

The Family Functioning Style Scale is a relatively new instrument. The preliminary analysis (1990) is based upon a sample of 105 participants in a study being conducted at the Center for Family Studies, Western Carolina Center. Further investigation by the researcher as to the status of the large scale study yielded no new information until January 1994 when Trivette forwarded an 'in press' chapter outlining the results of continued research using the Family Functioning Style Scale. At this writing, the scale has been used with 241 parent participants of preschool-aged children. The scale has proven to have excellent internal consistency characteristics (reliability coefficient = .85, coefficient alpha = .92); and, is related to both criterion ($R = .67$, $p < .0001$) and outcome measures ($R = .59$, $p < .0001$) in an expected manner (Trivette et al., 1994). A factor analysis of the scale produced five family strength dimensions (interactional patterns, family values, coping strategies, family commitment, resource mobilization) and correlations between the five factor scores demonstrated, "...that the different dimensions of family strengths are somewhat interrelated although not substantially so, providing support for the contention that each dimension represents a unique set of family strengths" (Trivette et al., 1990, p. 25).

It was, therefore, decided to proceed with the Family Functioning Style Scale because:

- a) it is the most comprehensive measurement available in terms of the range of qualities it attempts to determine;
- b) the theoretical perspective of intervening with families from a proactive, empowering position;
- c) the scale's initial normative trials were with both families with handicapped children and families without handicapped children; and,
- d) the preliminary data regarding the relationship between item scores and group contrasts suggest primary caregiver can complete the scale without affecting reliability and validity.

Other scales which were considered to measure family strengths included Family Inventories: Family Strengths (Olsen et al., 1982); Family Strengths Inventory (Stinnett & DeFrain, 1968); and the Family Strength Questionnaire (Otto, 1963).

The Family Strengths Scale is part of a series of nine measures of family functioning collectively titled Family Inventories (Olsen et al., 1982). The scale is designed to measure family members perceptions of their family's strengths. It is a self-administered 12-item measure of two aspects of perceived family strength, pride and accord. Family members use a five point Likert scale format to indicate degree of agreement with items relating to respect, trust, loyalty, pride, and sense of competency.

The Family Strengths Inventory (Stinnett et al., 1968) was also designed to measure family members perceptions of their family strengths. It is a self-administered and self-scored 13-item measure designed to reflect the six qualities Stinnett believed strong families shared (commitment, appreciation, communication, time together, spiritual wellness and coping ability). Family members use a five point Likert scale format to indicate degree of agreement with items relating to the six qualities.

The Family Strength Questionnaire (Otto, 1963) was designed to gain a clearer understanding of what families consider their strengths to be. This questionnaire asks families to respond to the open-ended statement, "The following are what we consider to be major strengths in our family". Blank lines are provided to be filled in by the husband and wife in consultation with each other.

All three scales were deemed not suitable for this research study for the following reasons. First, these scales measure a narrow scope of qualities associated with family strengths; second, Otto's open-ended question format was not suitable for this research design, by itself; third, psychometric information was not available for Stinnett's scale; and finally, none of the scales were developed for use with the handicapped population.

Informed Consent

As stated, all subjects were provided with verbal and written assurances that participation in the study was voluntary and that refusal to participate would not affect current or future service. Participants were asked to acknowledge that they had been informed of their rights through signing of a consent form prior to completion of the measurement package.

Confidentiality

Information from this study was confidential and results were reported in aggregate form only. The data collected was coded prior to any analysis and the anonymity of client participants was carefully protected in a locked file cabinet in the student researcher's home office. The data will be destroyed after successful defense of the completed thesis.

Client Risks or Hazards

It is recognized that any careful examination of self or family, (necessary to complete the measurement package of this study), may precipitate concerns on the participants part that require discussing. Since counselling was not a component of this research study, any participants request to discuss concerns would be referred to appropriate community resources.

Summary

This chapter has outlined the methodology used in the study to explore the strengths of families with and without handicapped children. In Chapter Four, the results of the study will be presented.

CHAPTER FOUR

RESULTS

This chapter presents the statistical analyses of the data and outline the results of the study. The initial phase of the process analyzed descriptive data collected from the three measurements: The Information on Primary Caregiver Questionnaire, The Information on Child in Family with Disability Questionnaire, and The Family Functioning Style Scale. The second phase of the process analyzed the inferential data to evaluate the hypothesis and to compare selected variables from the three measures for both the Handicapped group and Nonhandicapped group.

Statistical Inference

As stated, analysis began with a compilation of descriptive statistics from the three measures: The Information on Primary Caregiver Questionnaire, The Information on Child in Family with Disability Questionnaire, and The Family Functioning Style Scale. Tables 4 and 5 present the descriptive demographic statistics of the non-handicapped group and the handicapped group from the Information on Primary Caregiver Questionnaire. Tables 6 and 7 present the descriptive demographic statistics of the handicapped group from the Information on Child in Family with Disability Questionnaire. Table 8 presents descriptive statistics of the non-handicapped group, handicapped group and the Trivette group from The Family Functioning Style Scale. The following sections will highlight some of these results, as well as make comparisons to research in which the Family Functioning Style Scale and/or the Disability Index were used previously.

The Primary Caregivers

The overall sample consisted of 39 participants with the handicapped group consisting of 26 participants and the nonhandicapped group consisting of 13 participants. All participants completed the Information on Primary Caregiver Questionnaire.

The majority (97.4%) of the primary caregivers were female ($n = 38$) with the single male ($n = 1$) being identified within the handicapped group. The majority (82.1%) of the participants were married in the study with 92.3 percent married in the handicapped group ($n = 24$) and 61.5 percent married in the nonhandicapped group ($n = 8$). The average age of the primary caregiver for both groups was 30 to 31 years of age. The average number of children for the participants in the study was 2.423 for the handicapped group and 1.769 for the nonhandicapped group. Overall, the majority of both groups (87.2%) had three or less children. The average age of the children in both groups was 5.4 years of age. It should be noted that the means and standard deviations of the children's ages are influenced by the presence of blended families amongst the participants.

Income levels of the total sample indicated 74.4 percent of participants earned \$55,000 or less in the 1993 taxation year. The two groups had similar levels with the below \$55,000 yearly income level for the handicapped group being 76.9 percent and the non-handicapped group at 69.3 percent. The nonhandicapped group comprised 38.5 percent of families subsisting on the \$25,000 or less with the handicapped group reporting 19.2 percent of families living on \$25,000 or less.

The majority (69.2%) of the participants in the study claimed a religious affiliation with the handicapped group at 73.1 percent and the nonhandicapped group at 61.5 percent. The most frequently occurring religious denomination was Anglican (29.6%) followed by Roman Catholic and Mennonite with eighteen percent (18.5%) each.

Eighty four percent (84.6%) of the handicapped group indicated completion of senior high school and/or college. Within the nonhandicapped group, 61.6 percent had finished senior high school and/or college. The design of the Information on Primary Caregiver Questionnaire for the variables of income levels and educational level and subsequent coding for statistical analysis did not allow for mean and standard deviations to be calculated for these two characteristics.

Variable		Handicapped		NonHandicapped	
		FREQ	PCT	FREQ	PCT
Gender	Male	1	3.8	0	0
	Female	25	96.2	13	100
Marital Status	Yes	24	92.3	8	61.5
	No	2	7.6	5	38.5
Income	Under 25000	5	19.2	5	38.5
	25000-55000	15	57.7	4	30.8
	Over 55000	3	11.5	3	23.1
Religion	Yes	19	73.1	8	61.5
	No	7	26.9	5	38.5
Denomination	Anglican	7	26.9	1	7.7
	Catholic	2	7.7	3	23.1
	Mennonite	5	19.2	0	0
Education	Senior	13	50.0	5	38.5
	College	9	34.6	3	23.1
	Undergrad	2	7.7	2	15.4

Table 4: *Frequencies and Percentages of the Demographic Data of Sample from the Information on the Primary Caregiver Questionnaire.*

Variable		Handicapped		NonHandicapped	
		X	SD	X	SD
Age Primary Caregiver		31.34	5.906	30.38	6.71
Number of Children		2.423	1.102	1.769	.725
Age of Children	1	7.538	5.515	6.154	2.672
	2	5.238	4.908	4.625	3.021
	3	4.364	5.714	3.500	2.121
	4	7.667	9.815	0	0
	5	4.000	5.657	0	0

Table 5: *Means and Standard Deviations of the Demographic Data of Sample from the Information on the Primary Caregiver Questionnaire.*

In summary, a profile of the combined sample of this research study indicated that 82.1 percent were in married relationships; 87.2 percent had two parents, (three or less children families); 69.2 percent of the families indicated a religious affiliation, with the most frequent denomination being Protestant (Anglican = 29.6%), followed by Roman Catholic (18.5%); approximately 30 percent of the families earned incomes of \$25,000 or less, with approximately 44 percent earning in the range of \$25,000 to \$55,000.

This profile was comparable (although caution is advised due to differences in categorizing data) to both Canadian and Albertan demographic statistics, respectively, along the dimensions of married relationships (56.9% and 58.4%); two parent with two or less children (91.5% and 86.9%); families with religious affiliations (86.5% and 79.5%), with the most frequent denomination following a regional trend of Protestant before Catholic, which is opposite to Canada as a whole; and, family incomes earned under \$20,000 (16.1% and 15.4%) and family incomes earned in the \$20,000 to \$50,000 range (41.2% and 39.6%) [Stats Canada, 1991].

The Child with Disability

There were 26 participants in the handicapped group who completed the Information on Child in Family with Disability Questionnaire. The gender of the handicapped children was 46.2 percent male ($n = 12$) and 53.8 percent female ($n = 14$). The average age of the handicapped child was four years. The majority of the participants (61.5%) identified cerebral palsy as the primary diagnosis of their child ($n = 16$). The second most identified diagnosis was developmental delay with 19.2 percent of the participants ($n = 5$). There were 11.5 percent of participants who declared the diagnosis as unknown with their child ($n = 3$). Children with spina bifida and muscular dystrophy were equally represented ($n = 1$) for both groups.

Fifty eight percent (58%) of the children had marked physical disabilities. Thirty eight percent (38%) of the children were perceived as having moderate to severe cognitive impairment. Sixty nine percent (69%) had a moderate to severe need for ongoing, specialized medical attention, with thirty one percent (31%) requiring frequent and/or constant assistance over the course of their lives to perform everyday activities such as eating, bathing and toileting. These results compare to Trute's (1990) use of the Disability Index in a study of 88 families in the city of Winnipeg, Manitoba, in which there was a young, developmentally disabled child. Forty nine percent (49%) of the children had multiple handicaps. Twenty four percent (24%) had marked physical disabilities. Twenty percent (20%) had a severe need for ongoing, specialized medical attention and would need constant assistance over the course of their lives to perform everyday activities such as eating, bathing and toileting.

Variable		FREQ	PCT
Gender	Male	12	46.2
	Female	14	53.8
Diagnosis	Cerebral Palsy	16	61.5
	Spina Bifida	1	3.8
	Muscular Dystrophy	1	3.8
	Developmental Delay	5	19.2
	Unknown	3	11.5
Physical	No/Mild	11	42.3
	Moderate/Severe	15	57.7
Mental	No/Mild	16	61.5
	Moderate/Severe	10	38.4
Medical	No/Some	8	30.8
	Moderate/Severe	18	69.2
Longterm	Little/Moderate	18	69.3
	Frequent/Constant	8	30.7

Table 6: *Frequencies and Percentages of the Demographic Data of Sample from the Information on the Child in Family with Disability Questionnaire.*

Variable	X	SD
Age of Handicapped Child	4.038	1.777
Physical	2.769	1.031
Mental	2.307	1.087
Medical	2.769	0.815
Longterm	2.269	1.185

Table 7: *Means and Standard Deviations of the Demographic Data of Sample from the Information on the Child in Family with Disability Questionnaire.*

Family Functioning Style Scale

Table 8 presents the means and standard deviations for the Family Functioning Style Scale Items for the Handicapped group and the Nonhandicapped group. As mentioned in Chapter Three, the Family Functioning Style Scale has been administered to a sample group of 241 participants and the means and standard deviations of this group are included in Table 8 for further comparison with this study's sample. (Trivette et al., 1990). The scoring system is such that a score of four or five is considered optimal with respect to the items representing the functioning style of the family. As can be seen from inspection of Table Eight for the two sample groups, the majority of the items had ratings between "A-little-like-my-family" (2) and "Usually-like-my-family" (4). These results differ from Trivette's et al. study in that the majority of their items had average ratings between "Sometimes-like-my-family" (3) and "Usually-like-my-family" (4). Overall, the data does not place either of this study's groups in the optimal range of functioning.

Test of the Hypothesis

According to Munro, Visintainer and Page (1986):

...when comparing two groups on some continuous variable, it does not matter whether one uses a t-test or a one-way analysis of variance. The results will be mathematically identical. The t-statistic is equal to the square root of the F-statistic. With the use of [the] computer...some people will use ANOVA to compare two groups. Either way is correct; it is a matter of individual preference". (p. 157)

Scale Items	Handicapped		Nonhandicapped		Trivette	
	X	SD	X	SD	X	SD
1. Make personal sacrifices	3.385	.571	3.077	.862	4.08	.99
2. Agree how family members behave	3.192	.571	3.077	.760	3.91	1.07
3. Believe there is good in bad situation	3.038	.824	2.308	.947	3.69	1.10
4. Take pride in family accomplishments	3.769	.514	3.385	.650	4.49	.81
5. Family members share concerns, feelings	2.538	.859	2.846	.801	3.73	1.08
6. Family sticks together	3.538	.859	3.692	.480	4.53	.84
7. Asks for help outside family	2.000	.938	1.846	1.068	2.92	1.28
8. Agree about important family matters	3.385	.752	3.385	.506	4.21	.83
9. Pitch in and help each other	2.962	.720	2.923	.964	4.07	.98
10. Try not to worry uncontrollable events	2.115	1.107	2.385	1.193	3.40	1.02
11. Try to look at bright side of things	3.115	.711	2.923	.954	3.98	.89
12. Spend time together	2.654	1.129	3.077	1.038	3.93	1.00
13. Family has rules-acceptable behavior	2.923	.744	3.231	.725	3.78	1.03
14. Informal network will help	3.346	.892	3.154	1.144	3.95	1.22
15. Makes decisions about problem solving	3.115	.864	3.154	.987	4.19	.90
16. Enjoy spending time together	3.000	1.058	3.077	.862	4.04	1.03
17. Try to forget overwhelming problems	2.077	1.230	1.769	1.013	3.53	1.06
18. Listen to both sides of a story	2.231	.951	2.846	.899	3.63	1.05
19. Make time for important things	2.808	1.021	3.077	1.038	4.04	.96
20. Depend upon each other in difficulty	3.192	.939	3.385	.870	4.49	.84
21. Talk different ways to deal problems	2.462	.905	2.769	.599	3.71	1.14
22. Family relationship outlast possession	3.577	.857	3.692	.630	4.57	.86
23. Decision making benefits whole family	3.423	.902	3.692	.630	4.20	1.17
24. Family can depend upon each other	3.462	.706	3.308	.751	4.42	.83
25. Don't take each other for granted	2.885	.711	2.923	.494	4.04	.94
26. Solve own problems, then ask for help	3.462	.761	3.538	.660	4.56	.76

Table 8: Means and Standard Deviations of the Family Functioning Style Scale Items.

Having not developed an individual preference, the researcher thus undertook an inquiry to determine which statistical method to use for this study. The assumptions for use of the t-test and the one way analysis of variance are the same; that is, continuous data should be mutually exclusive (independent of each other), the dependent variable should be normally distributed, and the groups should have equal variances (homogeneity of variance) [Munro et al., 1986]. The two groups under study in this research meet the assumptions for use of either the t-test or the one way analysis of variance. Therefore, a review of existing social work research practice was of assistance in the decision to use the t-test for this research.

Generally, researchers will use the most powerful test that can be justified. The t-test is appropriate for use when there is a dichotomous nominal independent variable (ie., handicapped and nonhandicapped groups) and an interval level dependent variable (FFSS) [Rubin & Babbie, 1989; Yegidis & Weinbach, 1991]. It is also the statistical technique that is most commonly used to compare two groups (Munro et al., 1986; Reid & Smith, 1981). The t-test compares the between group variation of scores with the variation within groups using all the raw scores in its computation. The complexity of the t-analysis explains why it is such a powerful test for examining a relationship between two variables (Weinbach & Grinnell, 1991).

Social work researchers often use the t-test because a relatively small sample size is suitable (Borg & Gall, 1989; Reid & Smith, 1981). As well, the comparison groups do not need an equal number of participants. The discrepancy between the two group sizes is automatically controlled for by the t-test (Weinbach & Grinnell, 1991).

Although the one way analysis of variance can be used to determine whether two means differ significantly from each other and will yield the same result as the calculation of a t-value (Borg & Gall, 1989), it is more commonly used when there are more than two groups and there is interest in the differences among the set of groups (Borg & Gall, 1989;

Munro et al., 1986; Reid & Smith, 1981; Weinbach & Grinnell, 1991). Therefore, the t-test was used in this research on the basis of meeting the assumptions for use of the t-statistic: small sample size; dichotomous independent variable; unequal group sizes; and common usage in social work research when comparing only two group means.

The first step in the data analysis was to test the hypothesis. The research hypothesis tested was: 1) Families with handicapped children would show different strengths than do families without handicapped children.

The null hypothesis stated that no difference would be found in strengths between families with handicapped children and families without handicapped children. To compare the equivalence of the Handicapped group and the Non-handicapped group, an independent sample t-test was conducted. The categorical variables of the Family Functioning Style Scale are Family Identity, Information Sharing and Coping/Resource Mobilization. The three variables are represented by categorical scores derived from the sum of the subscale scores which are derived from the sum of scale items. For example, Information Sharing is a categorical variable deriving its numerical score from the subscales of Commitment and Role Expectations. Commitment is the sum of scale items Five and 18 whereas, Role Expectations is the sum of scale items Two and 13. When these three variables were subjected to an independent t-test comparing the handicapped group and non handicapped group, no significant differences were found between the two groups. Hence, the research hypothesis was rejected and the null hypothesis was accepted (see Table 9). Thus, families with handicapped children did not show different strengths than families without handicapped children.

Additional Analysis

Although there were no statistically significant differences between the handicapped and nonhandicapped group as regards the Family Functioning Style Scale, further

Variable		X	SD	T Value	Degree Freed.	P Value
Family Identity	Handicapped	32.42	5.82	-.35	37	.726
	Nonhandicapped	33.08	4.56			
Information Sharing	Handicapped	10.88	2.49	-1.33	37	.193
	Nonhandicapped	12.00	2.45			
Coping/Resource Mobilization ($p \leq .05$)	Handicapped	34.35	4.94	.50	37	.619
	Nonhandicapped	33.46	5.67			

Table 9: *Independent Sample T-Tests on Handicapped and Nonhandicapped Groups for the Family Functioning Style Scale (FFSS).*

analyses to discern any patterns or trends of differences/similarities between the two groups were conducted. A visual review of Table 8 led to some observations. Differences in scale items Three, 12, 17 and 19 were present between the handicapped and nonhandicapped groups. Scale items Five, Seven, 10, 18, 21 and 25 were below average for both groups. All other scale items indicated average or above scores for both groups. With these observations in mind, it was decided to examine the relationships between the handicapped group and the nonhandicapped group vis-à-vis the Scale Items. The Mann-Whitney U Test was chosen as the test of choice because of the ordinal level of measurement of the Scale items (see Table 10). The results indicate the observed significance level corrected for ties is significant ($p < .05$) for Question Three, "We believe that something good always comes out of even the worst situations" ($p = .021$), and Question Four, "We take pride in even the smallest accomplishments of family members" ($p = .033$). These results are not inconsistent with the narrative comments many parents provided on the FFSS. A sampling is provided in Table 11 (see Table 11).

The strength of relationships between selected demographic characteristics of the sample groups and the Family Functioning Style Scale variable's Identity, Resources and

Scale Items	Mean Rank		U	P Value
	Handicapped	Nonhandic.		
1. Make personal sacrifices	21.17	17.65	138.5	.3058
2. Agree how family members behave	20.56	18.88	154.5	.6419
3. Believe there is good in bad situation	22.81	14.38	96.0	.0218*
4. Take pride in family accomplishments	22.21	15.58	111.5	.0338*
5. Family members share concerns, feelings	18.73	22.54	136.0	.2932
6. Family sticks together	19.85	20.31	165.0	.8826
7. Asks for help outside family	20.77	18.46	149.0	.5284
8. Agree about important family matters	20.38	19.23	159.0	.7414
9. Pitch in and help each other	20.02	19.96	168.5	.9869
10. Try not to worry uncontrollable events	18.94	22.12	141.5	.3830
11. Try to look at bright side of things	20.62	18.77	153.0	.6082
12. Spend time together	18.60	22.81	132.5	.2577
13. Family has rules-acceptable behavior	18.60	22.81	132.5	.2303
14. Informal network will help	20.58	18.85	154.0	.6216
15. Makes decisions about problem solving	19.67	20.65	160.5	.7871
16. Enjoy spending time together	20.00	20.00	169.0	1.000
17. Try to forget overwhelming problems	20.88	18.23	146.0	.4678
18. Listen to both sides of a story	17.83	24.35	112.5	.0696
19. Make time for important things	18.98	22.04	142.5	.4043
20. Depend upon each other in difficulty	19.21	21.58	148.5	.5050
21. Talk different ways to deal problems	18.63	22.73	133.5	.2506
22. Family relationship outlast possession	19.73	20.54	162.0	.7848
23. Decision making benefits whole family	18.98	22.04	142.5	.3424
24. Family can depend upon each other	20.79	18.42	148.5	.4938
25. Don't take each other for granted	19.71	20.58	161.5	.7996
26. Solve own problems, then ask for help	19.75	20.50	162.5	.8240
(p ≤ .05)				

Table 10: Mann Whitney U Test of the Family Functioning Style Scale (FFSS).

We do have to work hard at not letting things overwhelm us, like all the medical responsibilities.
We spend alot of time together as a family.
...is a special girl, she can always make you laugh when you feel nothing possibly can, and she seems to have a special quality in knowing just the right time for those special hugs.
Praising our children for accomplishments.
We always find 5 minutes a day to cuddle.
We can lean on each other when times get tough.
Children are usually given much praise for accomplishments.
Having ... has helped us to understand each other.
We agree that a positive attitude and outlook on life is the best thing for ... future.
Our family has been through some pretty rough times and the only way we've gotten through them is by being for each other: whether it be just to talk and listen or to cry.
Can appreciate and live with other differences.

Table 11: Sampling of Narrative Comments Regarding Major Strengths of Young Families from the Family Functioning Style Scale.

Sharing were also examined using Pearson's correlation, the Spearman rank correlation coefficient and/or Chi square depending upon the level of measurement of the variables. It is recognized that this approach to analysis may lead to a Type I error and that the apparent relationship would be related to chance only (Weibach & Grinnell, Jr., 1991). In fact, only one relationship was found to be statistically significant. Within the handicapped group, a significant relationship was found between the age of the primary caregiver and the resources variable of the Family Functioning Style Scale ($r = .5031$, $n = 26$, $p = .009$). No other significant relationships were found for either the handicapped or nonhandicapped groups when relationships between Identity, Resources and Sharing were examined alongside income, number of children, age of handicapped child, and education of primary caregiver. Similarly, no significant relationships were determined

between Identity, Resources and Sharing with the variables of the Disability Index: medical, mental, physical and long-term. Family functioning was not directly related to religious affiliation nor marital status of the families. Therefore, tables of these statistical analyses were not included.

Summary

In summary, the hypothesis of this study that families with handicapped children would show different strengths than did families without handicapped children was rejected on the basis of the results of the independent sample t-test indicating no significant differences between the handicapped and nonhandicapped groups on the Family Functioning Style Scale. Additional analyses, however, indicated statistical significance between the two sample groups on Questions Three and Four of the scale items of the Family Functioning Style Scale. Further analysis also indicated a positive and significant relationship between the age of the primary caregiver and his/her ability for Coping/Resource Mobilization. No other significant relationships were found between the Handicapped and Nonhandicapped groups of this research study. The implications and conclusions that can be drawn from these results will be discussed in the next chapter.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

This chapter summarizes the study and identifies the conclusions that can be drawn from the research results. Consideration is given to the nature of the study and its results in relation to the original hypothesis. The research limitations are also detailed. Finally, the implications for social work practice are discussed and recommendations for future research are provided.

Nature of Study, Results and the Original Hypothesis

This study was designed to compare the strengths in families of young handicapped children with the strengths in families without handicapped children. It was hypothesized that families with young handicapped children would show different strengths than families without handicapped children. As previously detailed in Chapter Two, this hypothesis was determined after a review of the literature on families with handicapped children which suggested these families show differences in individual, marital and family domains (Cummings et al., 1986; Dyson, 1991; Friedrich & Friedrich, 1981). To test this hypothesis, 26 primary caregivers with young handicapped children, from a convenience sample, completed a self-report measurement package including the Family Functioning Style Scale, Information on Primary Caregiver Questionnaire and Information on the Child in the Family with Disability Questionnaire. A comparison group of 13 primary caregivers without handicapped children, also from a convenience sample, completed a measurement package including the Family Functioning Style Scale and the Information on Primary Caregiver Questionnaire. The results of the Family Functioning Style Scale for the comparison groups were evaluated for statistical significance using an independent sample T-test. The statistical results indicated that there were no significant differences ($p \leq .05$) between the strengths in families with

handicapped children and the strengths in families without handicapped children. On this basis, it was concluded that the results did not support the original research hypothesis. The lack of group differences is important to note because it may indicate that families that include a child with disabilities are more comparable to than different from families that include nondisabled children.

One explanation for the discrepancy between previous studies and the present research findings may be the nature of this sample. The parents sampled were relatively well-educated and the majority lived in families with two parents present. In addition, all the parents with children with disabilities had a current affiliation with professional support. This combination of education, family structure and ease of resource accessibility may have produced a sample that is nonrepresentative and nonheterogeneous, and therefore the sample exhibited less variability.

The demographic information of the families with handicapped children, in the present study, revealed a profile indicating the majority of families were intact, with two parents (92.3%); were middle income earners (57.7%); claimed a religious affiliation (73.1%); and were high school and/or college graduates (84.6%). There was some evidence in the literature that certain demographic characteristics had a positive relationship with family functioning in families with handicapped children. Marriage appeared to act as a important coping resource, and higher levels of education allowed increased access to information and more sophisticated problem solving skills (Beresford, 1994). Additionally, the socioeconomic status of a family could have an impact upon the family's ability to access practical resources (Dyson, 1991; Mahoney, O'Sullivan & Robinson, 1992). Finally, several studies had found that families of children with disabilities had a strong moral-religious orientation (Dyson, 1991; Fewell, 1986; Hanline & Daley, 1992).

Another explanation for the discrepancy between previous studies and the present research findings may be that many of the previous studies did not include comparison families. When comparison families are added to the research design, some of the earlier claims may be brought into question (Van Riper et al., 1992). Recent studies, in which comparison groups were included, have determined no statistical difference in strengths of Hispanic families with and without handicapped children (Hanline & Daley, 1992); families of children with disabilities have family environments comparable to those families without disabled children (Mahoney et al., 1992); no difference between samples on parent related stress of the Parenting Stress Index (Innocenti et al., 1992); and, families containing disabled children are not found to be any more distressed or disorganized than other families (Trute, 1990). It would appear that some families are able to adjust to the challenge of raising a disabled child and maintain a high level of family strength (Abbott & Meredith, 1986).

Nevertheless, despite similarities between families of children with and without disabilities, there were significant differences on two subscales: positivism and appreciation. Question Three reads, "We believe that something good always comes out of even the worst situations". This scale item relates to the subscale of positivism and the category of coping/resource mobilization. Question Four reads, "We take pride in even the smallest accomplishment of family members". This scale item relates to the subscale of appreciation and the category of family identity. The concept of positivism as a cognitive coping strategy has received considerable attention in the literature of families with handicapped children. A parent's ability to focus on the positive aspects of their child and their situation has been found to be positively associated with adjustment (Turnbull, Brotherson, & Summers, 1985). Abbott and Meredith (1986) found that parents of children with a variety of disabilities who were able to define their situations

in a positive way (ie., emphasizing their child's unique strengths and positive qualities), and who could use their personal psychological strength as a resource were better able to generate family unity.

Other studies have also found that the use of the cognitive coping strategy of positivism, also referred to as reframing and positive restructuring, tended to be predictive of family strengths (Beresford, 1994; Hanline & Daley, 1992). Religious beliefs may offer a way for parents to reframe the experience of their child's disability (Fewell, 1986). Viewing religious beliefs as a cognitive process positively related to coping strategies is beginning to receive more attention in recent literature (McIntosh, Silver, & Wortman, 1993). As stated previously, studies have found that families of children with disabilities have a strong moral-religious orientation (Dyson, 1991; Fewell, 1986; Hanline & Daley, 1992; Mahoney, et al., 1992). Indeed, in the present research study, 73 percent of the families with handicapped children indicated a religious affiliation.

The concepts of pride/appreciation as it relates to family identity has received some attention in the literature. As stated previously, the early work of Davis (1980) related pride to family identity as an individual family member's perception of the worthiness of his/her family. Olson and McCubbin (1983) included the concept of family pride as one aspect of family strengths which focuses upon loyalty, optimism and trust in one's family in their development of the Family Inventory: Family Strengths Scale. A brief review of the literature utilizing the Family Strengths Scale (Olson & McCubbin, 1983) did not indicate any significant relationship regarding family pride between families with and without disabled children (Abbott & Meredith, 1986; Hanline & Daley, 1992). Having a sense of optimism enables parents to adopt adaptive strategies such as focusing on the positive aspects of their predicament (Beresford, 1994). Although this significant result

is not well substantiated in the research literature, some of the comments by parents on the Family Functioning Style Scale indicate that pride in all family member's accomplishments are appreciated and praised in families with handicapped children (see Table Eleven).

The positive relationship between the age of the primary caregiver and the coping/resource category of the Family Functioning Style Scale may infer that the older parent represents a more experienced family that will find care of a disabled child easier to integrate into the family. However, a recent research finding by Failla and Jones (1991) is contrary to this view. They determined that older parents with more children and more relationships to handle may have a more difficult time meeting the challenges of rearing a child with developmental disabilities than younger parents.

Limitations of the Study

As has been noted previously, the research study did have limitations in several areas including: self-report methodology, instrumentation, nonprobability sampling procedure, small sample size, and researcher bias. The following is a discussion of these limitations.

The measurement package relied solely on self-report information. The data may therefore have been vulnerable to distortion because family members do not always provide an accurate account of family interactional behaviours. A common reason is that people provide socially desirable responses to create a particular impression of themselves (Stoneman & Brody, 1984). In this research study, the influence of a socially desirable response set was evident in two participants who called the researcher for clarification in completing the Family Functioning Style Scale. Both stated difficulty in rating their family's strengths as they really were or as they would wish them to be. To offset the possible impact of the socially desirable response set, the researcher impressed upon these participants the importance of answering questions

honestly. This strategy can also be applied to a second distortion with self-report methodologies that making a self-report response on a questionnaire is consequence free (Stoneman & Brody, 1984).

Problems with instrumentation were also noted. Family measurement is not a well-developed area, especially in dealing with non-typical populations. There is a continued need for the development of tests that accurately reflect the phenomena being assessed for non-typical populations (Innocenti et al., 1992).

The Family Functioning Style Scale was specifically designed to characterize strengths that may be uniquely associated with raising children with disabilities. Therefore, it was the instrument of choice for this research study despite its tentative reliability and validity. Reliability and validity of the Family Functioning Style Scale will only be established through continued use in research.

The questionnaires which were developed by the researcher, the Information on the Primary Caregiver and the Information on the Child in the Family with Disability are not valid or reliable instruments, although they generated adequate demographic information for this study.

In the Information on the Primary Caregiver questionnaire, instructions were not given as to which parent in the family was to complete the measurement package. A generic designation of 'primary caregiver' was decided upon. This may be problematic in that there is a focus in recent literature to differentiate maternal and paternal views upon many individual, marital and family dimensions in families with children with disabilities (Bailey, Blasco, & Simeonsson, 1992; Krauss, 1993; Rousey, Best, & Blacher, 1992). It has also been suggested however, that the family member who is the primary care provider may be most cognizant of family life events; thus, the mother's perceptions may be more accurate than family members who are less involved with care

of the child. Using multiple family respondents does not assure more valid data about family functioning (Failla & Jones, 1991).

A nonprobability sampling procedure was used, therefore, the results of the study cannot be generalized to the population at large. A convenience sample, meaning a sample composed of most available participants, was selected which also limits the opportunity to generalize the results. The use of volunteer participants of the research is also a limitation in that they are likely to be a biased sample of the target population since volunteers have been found to differ from nonvolunteers (Borg & Gall, 1989).

A final limitation of the study was the possible effect of researcher bias. This type of bias exists when the researcher is emotionally involved with the topic of his/her research and may make errors in sampling, in selecting measures, in scoring the responses of participants, in recording of research data, all of which tend to favour the outcome they want (Borg & Gall, 1989). As stated previously, this limitation was addressed when the design of the study was reviewed by a colleague and found satisfactory.

Implications for Social Work Practice

The adoption of a strengths based perspective will significantly impact the theory, policy and practice development of social work. As stated previously, much of the social work literature on practice with families continues to use treatment, dysfunction and therapy metaphors. Taking a behavioural baseline of client deficits and examining the ability of social workers to correct these deficits have become the standard for evaluating the effectiveness of social work practice (Cowger, 1994). The shift from deficit and pathological perspectives to competency and strength based perspectives will require a rethinking of the client, the social worker and the policy makers role in this helping relationship. As stated previously, the emerging social work practice paradigm is to support and strengthen families in a way that is an empowering experience (Dunst et al.,

1994; Rappaport, 1981). Clinical practice based on empowerment assumes that client power is achieved when clients make choices that give them more control over their own lives (Cowger, 1994). Strengths based practices are ones that build on existing family capabilities as well as promote family acquisition of competencies that lead to empowering consequences (Dunst et al., 1994). Interventions that result from such principles should build upon family strengths rather than correct deficits as the primary way of supporting family functioning. Resources and supports will need to be made available to families in ways that maximize the family's control and decision-making power regarding the services they receive. The use of promotion and enhancement models of family support programs will increase the likelihood that people will become more capable and competent as a result of intervention efforts. Promotion and enhancement models are differentiated from other models in that is is not problem oriented and reactive but rather strengths based and proactive (Dunst et al., 1994).

The literature is supportive of strengths based perspectives for developing services for families with handicapped children (Dyson, 1991; Dyson & Fewell, 1986; Petr & Barney, 1993) and the number of studies in which no significant differences between normative groups and families with handicapped children on a variety of variables is increasing (Abbott & Meredith, 1986; Dyson, 1993; Van Riper et al., 1992), as was found in the present study. Social work professionals can have an impact on the lives of families with handicapped children by adopting the premise of strengths based practice and client empowerment and ensuring regular input from families into the design, implementation and evaluation of family support services.

Recommendations for Future Research

The research identifies issues that warrant further study. Given the fact that a great deal of the literature is contradictory about individual, marital and family functioning in

families with handicapped children may be an indication that the various methodologies and instruments are not accurately reflecting the experience of these families. An early intervention researcher tells a story about conducting a focus group to learn from parents what early intervention had meant to their families and what it had done for their children. To the researcher's surprise, they did not talk about any of the dimensions that form the base of the professional literature, discussion and debate (ie., IEP goals, curriculum models, development vs. functional approach) in early intervention. Rather, they talked about the importance of receiving information and support from the early intervention programs for themselves and the importance of early socialization and early educational placement for their child (Vincent, 1992). This story illustrates the need for more qualitative research to occur with this non-typical population in order to better understand how families with handicapped children conduct their daily lives. Alongside increasing the qualitative studies is the continuing need to hone the quantitative approaches by developing valid and reliable tests to measure family strengths and various other family characteristics. More attention to methodology is also required in the quantitative approaches to address issues of comparison groups, mother/father/sibling perceptions and modifying variables such as socioeconomic status. Replications of this family strengths study with a larger, random sample group would demonstrate broader generalizability of the findings.

Summary

This study has examined the strengths in families with young handicapped children in comparison to families without young handicapped children. A review of the relevant literature has been provided. Family strengths have been defined as, "...the competencies and capabilities of both various individual family members of the family unit that are used in response to crisis and stress, to meet needs and to promote, enhance

and strengthen the functioning of the family system” (Trivette et al., 1990). The methodology was described and the limitations identified. The results of the study indicate that the strengths of families with handicapped children do not differ with statistical significance from the strengths of families without handicapped children. The data does identify some strengths of handicapped families (ie., positivism and appreciation) that may predispose the family to successful adjustment in their care of a young handicapped child. The limitations of the present research have been explored, and implications for future social work practice and research have been identified. It is hoped that this study will provoke future interest and research in the topic of family strengths in families with young handicapped children.

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APPENDICES

Appendix A
Agency Consent Form

Agency Consent Form

INFORMED CONSENT FORM

Ms. Janet Kaszuba
 Coordinator, Pediatric Neuromuscular Unit
 960 - 19 St. S.
 Lethbridge , Alta
 T1J 1W5

Dear Ms. Kaszuba,

As promised in our earlier discussions regarding the present study, "Family Strengths in Households of Young Handicapped and Nonhandicapped Children: A Comparative Study", I am sending you this 'Informed Consent' form which I would request you to return to me signed. I will need the document before starting my data collection procedures in your agency.

You are aware that the study of families to determine preventative and positive approaches to strengthening their functioning in the present social milieu is of concern to all individuals in childhood services. It is my hope that the present study will contribute some understanding to the unique strengths families' possess. I am appreciative of your willingness to participate voluntarily in this study.

Your agency will be providing me with a potential participants list by supplying a mailing list of families with children under the age of 7. You have my word that I will maintain absolute confidentiality with respect to the identity of the participants. With respect to any research and/or academic publications resulting from this study, specific views and/or opinions will not be ascribed to your agency without your prior consent in writing. You may wish to note that this research endeavour is being supervised by Dr. Margaret Rodway, University of Calgary, Faculty of Social Work.

Your signature below on this 'consent form' indicates that you have understood to your satisfaction the information regarding your agency's participation in the research endeavour. In no way does this waive your legal rights nor release the researcher from her legal and professional responsibilities. Should you have any questions concerning your Agency's participation in this study, I will try to address them as quickly as possible or refer to the University for clarification.

Sincerely,

Holly Charles, B.S.W.

Janet Kaszuba, Director

Date: _____

Appendix B
Agency Consent Form

Agency Consent Form

INFORMED CONSENT FORM

Ms. Caroline Martin
 Executive Director, Children's House Child Care Society
 4 Ave. S.
 Lethbridge , Alta
 T1J 0M8

Dear Ms. Martin,

As promised in our earlier discussions regarding the present study, "Family Strengths in Households of Young Handicapped and Nonhandicapped Children: A Comparative Study", I am sending you this 'Informed Consent' form which I would request you to return to me signed. I will need the document before starting my data collection procedures in your agency.

You are aware that the study of families to determine preventative and positive approaches to strengthening their functioning in the present social milieu is of concern to all individuals in childhood services. It is my hope that the present study will contribute some understanding to the unique strengths families' possess. I am appreciative of your willingness to participate voluntarily in this study.

Your agency will be providing me with a potential participants list by supplying a mailing list of families with children under the age of 7. You have my word that I will maintain absolute confidentiality with respect to the identity of the participants. With respect to any research and/or academic publications resulting from this study, specific views and/or opinions will not be ascribed to your agency without your prior consent in writing. You may wish to note that this research endeavour is being supervised by Dr. Margaret Rodway, University of Calgary, Faculty of Social Work.

Your signature below on this 'consent form' indicates that you have understood to your satisfaction the information regarding your agency's participation in the research endeavour. In no way does this waive your legal rights nor release the researcher from her legal and professional responsibilities. Should you have any questions concerning your Agency's participation in this study, I will try to address them as quickly as possible or refer to the University for clarification.

Sincerely,

Holly Charles, B.S.W.

Caroline Martin, Director

Date: _____

Appendix C**Initial Letter**

January 8, 1994

Dear Parents,

Thank you for taking a few minutes of your time to read the enclosed information concerning a research study I am conducting titled:

Family Strengths in Households
of Young Handicapped Children and Nonhandicapped Children:
A Comparative Study

This study is being conducted for partial completion of my Master's Degree in Social Work from the University of Calgary.

Your participation in this study will be greatly appreciated not only by myself but also by parents who have children with handicapping conditions. It is hoped that information summarized from this study will influence both present and future policy direction for providing service to these families.

If you are willing to be a participant, please read, sign and return the INFORMED CONSENT FORM in the envelope provided. You can expect a telephone call from me once I receive the consent form, and subsequently, the measurement package will be mailed to you.

Thank You,

Holly Charles, B.S.W.

Appendix D
Summary of Study

Summary of the Study

FAMILY STRENGTHS

It is without a doubt that many families in the 1990's are meeting challenges and opportunities that stretch the very fabric of their daily lives and leave many to ponder whether or not they can cope with much more change!

What is remarkable is that the majority of families continue to find ways to enrich their family lives despite difficult times. It is my belief that every family has unique strengths and capabilities that gives their family a unique style, although each family has their own way of using their abilities. I am involved in a research study designed to discover what these unique strengths are and I need your assistance.

WHO: My name is Holly Charles and I have been a professional social worker for the last 8 years in the Lethbridge community. I am currently a graduate student at the University of Calgary - Faculty of Social Work. I am completing thesis research on the topic of Family Strengths in Households of Young Handicapped Children and Nonhandicapped Children and would appreciate your assistance in this study.

WHAT: The purpose of the study is to compare the family strengths in families with young handicapped children with families with nonhandicapped children.

MEASUREMENT TOOLS: Families who consent to participate will be asked to fill out a Primary Caregiver Information form, the Family Functioning Style Scale, and when appropriate, the Information on Child in Family with Disability form. These forms will be mailed to your home and take approximately 30 minutes to complete.

CONFIDENTIALITY: Confidentiality will be maintained in that participants identity will not be reported in the research data (number assigned only) and all documentation will be kept under lock and destroyed following successful defense of the completed thesis.

HOW TO REACH ME FOR FURTHER INFORMATION:

Days:

Pediatric Neuromuscular Unit - Lethbridge Regional Hospital
 Phone: 382-6162 (8:30 a.m. to 12:00 noon)
 or Phone message 381-2353 (1:00 p.m. to 4:00 p.m.)

Evenings:

Phone: 381-2353 (7:00 p.m. to 10:00 p.m.)

Appendix E**Participant Informed Consent Form**

INFORMED CONSENT FORM

- The purpose of the study is to compare the family strengths in families with young handicapped children with families with nonhandicapped children.
- Participation in the study is voluntarily and in no way influences my existing level of service from either the Pediatric Neuromuscular Unit nor the Children's House Child Care Society
- Confidentiality will be maintained in that my identity will not be released and research records will be identified by a case number only
- My responses to the measurement package will be analyzed and the results of the study will be written for the purpose of disseminating information. The results of the study will be made available to me upon my request.
- On completion of the successful defense of the thesis, all documentation will be destroyed by burning/shredding.
- The investigator, Holly Charles will respond to my questions to the best of her ability. She may confer with her supervisor, Dr. Margaret Rodway.

Participant: _____

Telephone number: _____

Date: _____

Witness: _____

Date: _____

Appendix F
Acknowledgement Letter

Holly Charles
LRH, Pediatric Neuromuscular Unit
960 - 19 St. S.
Lethbridge, Alta
T1J 1W5
ph: 382-6162 (8:30 a.m. to 12:00 noon)
ph: 381-2353 (home)

January 20, 1994

Dear Parents,

I would like to thank you for your willingness to participate in my research study and your prompt return of the 'Informed Consent' form. You will find enclosed the Measurement Package for you to complete and return to me. Please contact me should any questions arise. Thanks again.

Sincerely,

Holly Charles, B.S.W.

Appendix G
Information on Primary Caregiver Questionnaire

INFORMATION ON PRIMARY CAREGIVER

1. Case number _____

2. What is your date of birth?
 DOB _____
year/month/day

3. Circle primary caregiver's gender.
 Male 1 Female 2

4. Are you currently: married, widowed, divorced, separated, or have you never been married?
 Married 1 Widowed 2 Divorced 3
 Separated 4 Never married ... 5

5. How many children do you have? _____

6. Please list their date of birth and circle their gender.

 DOB _____ Male 1 Female 2
year/month/day

 DOB _____ Male 1 Female 2
year/month/day

 DOB _____ Male 1 Female 2
year/month/day

 DOB _____ Male 1 Female 2
year/month/day

7. In which of these groups did your total family income, from all sources, fall last year (1993) before taxes.

 A. Under \$10,000 01 B. \$10,000 to 25,000 02
 C. \$25,000 to 40,000 03 D. \$40,000 to 55,000 04
 E. \$55,000 to 70,000 05 F. Over \$70,000 06
 Refused 97 Don't know 98

8. Do you have a religious affiliation?

Yes 1 No 2

IF YES TO PREVIOUS QUESTION:

9. What is your religious affiliation?

Anglican 1	Lutheran 11
Baha'I Faith 2	United 12
Baptist 3	Jehovah Witness 13
Buddhist 4	Church of Jesus Christ of Latter Day Saints 14
Christian Reformed 5	Mennonite 15
Evangelical Christian 6	Hutterite 16
Emmanuel Christian 7	Native Spirituality 17
Calvin Christian 8	Salvation Army 18
Victory Christian 9	Other 19
Catholic 10	

10. Please indicate the highest level of schooling completed.

No formal school 0	Community College 4
Elementary School 1	Undergraduate University 5
Junior High School 2	Graduate University 6
Senior High School 3	Post Graduate University 7

Appendix H**Information on Child with Disability Questionnaire**

INFORMATION ON CHILD IN FAMILY WITH DISABILITY

1. Case number _____

2. What is the birthdate of your child with a handicapping condition?

DOB _____
 year/month/day

3. What is the child's sex?

Male 1 Female 2

4. What is your child's PRIMARY diagnosis?

Cerebral Palsy 1	Spina Bifida 2
Muscular Dystrophy 3	Syndrome 4
Developmental Delay 5	Unknown 6
Don't Know 98	

5. In your view:

To what extent will this child's disability affect his/her mental or intellectual development?

not at all	mildly	moderately	severely
1	2	3	4

To what extent will the disability affect physical development?

not at all	mildly	moderately	severely
1	2	3	4

To what extent will ongoing specialized medical attention be required?

no need	some need	moderate need	severe need
1	2	3	4

How much assistance will this child require over the years to perform everyday activities like eating, bathing, toileting?

very little	moderate	frequent	constant
1	2	3	4

(Question 5 Source: Trute Disability Index, 1990)

Appendix I
Family Functioning Style Scale

Family Functioning Style Scale

Angela G. Deal, Carol M. Trivette, & Carl J. Dunst

Family Name _____ Date _____

INSTRUCTIONS

Every family has unique strengths and capabilities, although different families have different ways of using their abilities. This questionnaire asks you to indicate whether or not your family is characterized by 26 different qualities. The questionnaire is divided into three parts. Part 1 below asks you about all members of your immediate family (persons living in your household). Part 2 on the next page asks you to rate the extent to which different statements are true for your family. Part 3 on the last page asks you to write down the things that you think are your family's most important strengths.

Please list all the members of your immediate family and fill in the information requested. When you are finished, turn to the next page.

FAMILY MEMBER	DATE OF BIRTH	AGE	RELATIONSHIP

Source: C.J. Dunst, C.M. Trivette, and A.G. Deal (1988). *Enabling and empowering families: Principles and guidelines for practice*. Cambridge, MA: Brookline Books. May be reproduced.

Listed below are 26 statements about families. Please read each statement and indicate the extent to which it is true for your family. There are not right or wrong answers. Please give your honest opinions and feelings. Remember that no one family will be like all the statements given.

To what extent is each of the following statements like your family:	Not At All Like My Family	A Little Like My Family	Sometimes Like My Family	Generally Like My Family	Almost Always Like My Family
1. It is worth making personal sacrifices if it benefits our family	0	1	2	3	4
2. We generally agree about how family members are expected to behave	0	1	2	3	4
3. We believe that something good comes out of the worst situations.	0	1	2	3	4
4. We take pride in even the smallest accomplishments of family members	0	1	2	3	4
5. We are able to share our concerns and feelings in productive ways	0	1	2	3	4
6. No matter how difficult things get, our family sticks together	0	1	2	3	4
7. We generally ask for help from persons outside our family if we cannot do things ourselves	0	1	2	3	4
8. We generally agree about the things that are important to our family.	0	1	2	3	4
9. In our family we are always willing to "pitch in" and help one another	0	1	2	3	4
10. If something beyond our control is constantly upsetting to our family, we find things to do that keep our minds off our worries	0	1	2	3	4
11. No matter what happens in our family, we try to look "at the bright side of things".	0	1	2	3	4
12. Even in our busy schedules, we find time to be together	0	1	2	3	4
13. Everyone in our family understands the rules about acceptable ways to act.	0	1	2	3	4
14. Friends and relatives are always willing to help whenever we have a problem or crisis.	0	1	2	3	4
15. When we have a problem or concern, we are able to decisions about what to do	0	1	2	3	4
16. We enjoy time together even if it is just doing house hold chores	0	1	2	3	4
17. If we have a problem or concern that seems overwhelming, we try to forget it for awhile	0	1	2	3	4
18. Whenever we have disagreements, family members listen to "both side of the story".	0	1	2	3	4
19. In our family, we make time to get things done that we all agree are important	0	1	2	3	4
20. In our family, we can depend upon the support of one another whenever something goes wrong	0	1	2	3	4
21. We generally talk about the different ways we deal with problems or concerns	0	1	2	3	4
22. In our family, our relationships will outlast our material possessions	0	1	2	3	4
23. Decisions like moving or changing jobs are based on what is best for all family members.	0	1	2	3	4
24. We can depend upon one another to help out when something unexpected comes up	0	1	2	3	4
25. In our family, we try not to take one another for granted	0	1	2	3	4
26. We try to solve our problems first before asking others to help	0	1	2	3	4

Please write down all things that you consider to be the major strengths of your family. Don't overlook the little things that occur everyday which we often take for granted (e.g., sharing the responsibility of getting your child fed and to school).

Appendix J

Reconsider Letter to Families with Handicapped Children

Holly Charles
LRH, Pediatric Neuromuscular Unit
960 - 19 St. S.
Lethbridge, Alta
T1J 1W5

ph: 382-6162 (8:30 a.m. to 12:00 noon)
ph: 381-2353 (home)

February 25, 1994

Dear Parents,

Early in the year, you may have received a letter from me requesting your participation in a research project I am doing for completion of my Master's in Social Work degree. I have been fortunate to have received 20 out of 40 participants, but I am still in need of 10 to 15 more willing participants.

I have enclosed the 'Informed Consent' form and the 'Measurement Package' for you to review and reconsider your participation. Your willingness to assist in this project would be greatly appreciated. Please contact me should any questions arise. Thanks again.

Sincerely,

Holly Charles, B.S.W.

Appendix K

Public Notice to Families without Handicapped Children



Lethbridge
Regional Hospital

960 - 19th St. S. Lethbridge, Alta. T1J 1W5 (403) 382-6111

DEAR PARENTS:

IF YOU HAVE ALREADY RECEIVED A PACKET FROM HOLLY CHARLES TO PARTICIPATE IN THE "FAMILY STRENGTHS STUDY", PLEASE RETURN YOUR SIGNED CONSENT FORM AS SOON AS POSSIBLE.

IF YOU HAVE NOT RECEIVED A PACKET, AND ARE INTERESTED IN PARTICIPATING, PLEASE TAKE AN ENVELOPE HOME.

THANK YOU

HOLLY CHARLES BSW.

Appendix L

Reconsider Letter to Families without Handicapped Children

Holly Charles
LRH, Pediatric Neuromuscular Unit
960 - 19 St. S.
Lethbridge, Alta
T1J 1W5
ph: 382-6162 (8:30 a.m. to 12:00 noon)
ph: 381-2353 (home)

March 2, 1994

Dear Parents,

Earlier in the year, you may have received a letter from me requesting your participation in a research project I am doing for completion of my Master's in Social Work degree from the University of Calgary. I have been fortunate to receive some positive response from parents of Children's House but I am still in need of 15 to 20 more willing participants.

I have enclosed the 'Informed Consent' form and the 'Measurement Package' for you to review and reconsider your participation. Completion of these forms and returning them in the envelope provided is the extent of your involvement in the study. Your willingness to assist in this project would be greatly appreciated. Please contact me should any questions arise. Thank you again.

Sincerely,

Holly Charles, B.S.W.

Appendix M**Family Functioning Style Scale: Scoring and Profiling Form**

Family Functioning Style Scale

Angela G. Deal, Carol M. Trivette, & Carl J. Dunst

Scoring and Profiling Form

Respondent _____ Date _____ Recorder _____

DIRECTIONS

The scoring profiling process is designed to facilitate accurate summation of responses on The Family Functioning Style Scale. The scoring sheet includes spaces for individual item scores, subscale scores, and category scores. The recorder should first enter the item score on the scoring sheet and then sum them to obtain the subscale score. The subscale scores for these separate categories of family strengths are then summed to obtain category scores. The subscale and category scores from the scoring sheets are transferred to the profile form by simply circling the number corresponding to the scores. The circled numbers are then corrected by pencil or pen to depict a family's profile of strengths.

Source: C.J. Dunst, C.M. Trivette, and A.G. Deal (1988). *Enabling and empowering families: Principles and guidelines for practice*. Cambridge, MA: Brookline Books. May be reproduced.

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	Subscale Score
Commitment	<input type="checkbox"/>																					<input type="checkbox"/>					
Appreciation				<input type="checkbox"/>																				<input type="checkbox"/>			
Time											<input type="checkbox"/>	<input type="checkbox"/>															
Sense of Purpose						<input type="checkbox"/>															<input type="checkbox"/>						
Congruence								<input type="checkbox"/>										<input type="checkbox"/>									
Communication							<input type="checkbox"/>										<input type="checkbox"/>										
Role Expectations	<input type="checkbox"/>											<input type="checkbox"/>															
Coping (I)											<input type="checkbox"/>						<input type="checkbox"/>										
Coping (II)													<input type="checkbox"/>						<input type="checkbox"/>								
Problem Solving														<input type="checkbox"/>						<input type="checkbox"/>							
Positivism			<input type="checkbox"/>								<input type="checkbox"/>																
Flexibility										<input type="checkbox"/>													<input type="checkbox"/>				
Balance							<input type="checkbox"/>																	<input type="checkbox"/>			
CATEGORY SCORE																											

Family Identity ☐ + ☐ + ☐ + ☐ + ☐ = ☐ + ☐ = ☐

Information Sharing ☐ + ☐ = ☐

Coping/Resource Mobilization ☐ + ☐ + ☐ + ☐ + ☐ + ☐ + ☐ = ☐

Family Identity ☐

Information Sharing ☐

Coping/Resource Mobilization ☐

FAMILY FUNCTIONING STYLE SCALE

PROFILE FORM

Family Identity	Commitment.....	0	1	2	3	4	5	6	7	8
	Appreciation.....	0	1	2	3	4	5	6	7	8
	Time.....	0	1	2	3	4	5	6	7	8
	Sense of Purpose.....	0	1	2	3	4	5	6	7	8
	Congruence.....	0	1	2	3	4	5	6	7	8
Information Sharing	Communication.....	0	1	2	3	4	5	6	7	8
	Role Expectations.....	0	1	2	3	4	5	6	7	8
Coping/Resource Mobilization	Coping I.....	0	1	2	3	4	5	6	7	8
	Coping II.....	0	1	2	3	4	5	6	7	8
	Problem Solving.....	0	1	2	3	4	5	6	7	8
	Positivism.....	0	1	2	3	4	5	6	7	8
	Flexibility.....	0	1	2	3	4	5	6	7	8
	Balance.....	0	1	2	3	4	5	6	7	8

Family Identity	0	10	20	30	40
Information Sharing	0 . . .	4 . . .	8 . . .	12 . . .	16
Coping/Resource Mobilization	0	12	24	36	48

Appendix N

Letter to Dr. B. Trute

June 10, 1993

Barry Trute
Child and Family Services Research Group
Faculty of Social Work
University of Manitoba
Winnipeg, Manitoba
R3T 2N2

Dear Professor Trute:

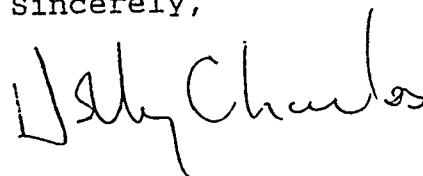
It was with interest that I read your article:

Trute, B. (1990). Child and parent predictors
of family adjustment in households containing
young developmentally disabled children.
FAMILY RELATIONS, 39, 292-297.

I am currently a graduate student at the University of Calgary, Faculty of Social Work Master's Program. My clinical thesis advisor is Dr. Margaret Rodway. In the above article you make reference to a Disability Index (DI) to assess the degree of physical and mental incapacitation in children with developmental delays. Since my thesis topic is: Family Strengths in Households of Young Handicapped and Non-Handicapped Children: A Comparative Study, I would greatly appreciate a copy of this index with its current psychometric properties noted, as well as permission to use the index should it meet my needs.

Thank you for your assistance and time.

Sincerely,



Mailing Address:
Holly Charles
c/o Pediatric Neuromuscular Unit
Lethbridge Regional Hospital
960-19 St. S.
Lethbridge, Alta
T1J 1W5
Phone: (403) 382-6162
Fax: (403) 382-6115

Appendix O

Letter of Permission from Dr. B. Trute



THE UNIVERSITY OF MANITOBA

FACULTY OF SOCIAL WORK

Winnipeg, Manitoba
Canada R3T 2N2Phone: (204) 474-9550
FAX: (204) 261-3283

September 3, 1993

Holly Charles
c/o Pediatric Neuromuscular Unit
Lethbridge Regional Hospital
960-19 St. S.
Lethbridge, Alta. T1J 1W5

Dear Holly:

I am sorry for the delay in my response to your letter of June 10, 1993 regarding the "Disability Index (DI)" used in our studies of families with children with developmental disabilities. I was away from the University of Manitoba on a sabbatical leave and then on summer holidays when your letter arrived.

Enclosed is a copy of the four items on this brief index. Only basic psychometric information is available for the DI. It has shown an alpha of .77 as an indicator of its internal consistency when field tested with 88 families. When correlated with DQ in a sample of 111 disabled pre-schoolers, an $r = -.59$ ($p < .01$) was found. This showed that it was moderately related to DQ. However, this finding also supports the contention that the DI goes beyond DQ to assess physical disability as well as mental incapacitation.

I hope these comments will be useful to you in deciding whether to use the DI. If you wish to employ it in your thesis research, please feel free to do so.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Barry Trute'.

Barry Trute, Ph.D., R.S.W.
Professor

Appendix P
Disability Index

INFORMATION ON CHILD IN FAMILY WITH DISABILITY

First name of child _____ dob yy/mm/dd sex _____

What disability best describes this child?

<u> </u> developmental delay	<u> </u> down's syndrome
<u> </u> cerebral palsy	<u> </u> epilepsy
<u> </u> emotional disturbance (e.g. hyperkinetic)	
<u> </u> hearing loss	<u> </u> mental retardation
<u> </u> vision loss	<u> </u> other... specify _____
<u> </u> autism	<u> </u> don't know
<u> </u> physical disability	

At what age was your child when you were told s/he had a disability?

In your view:

To what extent will this child's disability affect his/her mental or intellectual development?

not at all	mildly	moderately	severely
1	2	3	4

To what extent will the disability affect physical development?

not at all	mildly	moderately	severely
1	2	3	4

To what extent will ongoing specialized medical attention be required?

no need 1	some need 2	moderate need 3	severe need 4
1	2	3	4

How much assistance will this child require over the years to perform everyday activities like eating, bathing, toileting?

very little	a moderate amount	frequent	constant
1	2	3	4

Appendix Q

Correspondence to Dr. C. Trivette

**Lethbridge
Regional Hospital**

960 - 19th St. S. Lethbridge, Alta. T1J 1W5 (403) 382-6111

Pediatric Neuromuscular Unit
Lethbridge Regional Hospital
960 - 19th Street South
Lethbridge, Alberta T1J 1W5
January 6, 1993

Carol M. Trivette
Centre for Family Studies
Western Carolina Center
Morganton, North Carolina
U.S.A. 28655

Dear Ms. Trivette:

It was with great interest that I read your article,

Trivette, C.M., Dunst, C. J., Deal, A.G., Hamer, W.
& Propst, S. (1990) Assessing Family Strengths and
Family Functioning Style. Topics in Early Childhood
Special Education, 10 (1), 16-35.

I am currently studying for a Master's Degree in Social Work from the University of Calgary, Calgary, Alberta, Canada. My thesis study is to examine the characteristics of family strengths amongst families who have children with a wide variety of mental, physical and developmental disabilities. I am considering using the Family Functioning Style Scale (FFSS) as one of my instruments. Your article states that this instrument is being tested to establish reliability and validity although preliminary findings are promising. I would be interested in additional information about the scales efficacy, as well as any preliminary findings from your study about the family strengths characteristics.

Please send information to the above address. My work number is (403) 382-6162 or FAX (403) 382-6115.

Thank you for your assistance.

Sincerely,

Holly Charles, BSW



Lethbridge
Regional Hospital

960 - 19th St. S. Lethbridge, Alta. T1J 1W5 (403) 382-6111

Pediatric Neuromuscular Unit
Lethbridge Regional Hospital
960 - 19th Street South
Lethbridge, Alberta T1J 1W5
April 8, 1993

Carol M. Trivette
Centre for Family Studies
Western Carolina Center
Morganton, N.C.
U.S.A. 28655

Dear Ms. Trivette:

On April 1, 1993, I had an opportunity to speak with Angela Deal about the research that was conducted and reported on in your article:

Trivette, C. M., Dunst, C. J., Deal, A. G., Hamer, W., & Propst, S. (1990) Assessing Family Strengths and Family Functioning Style. Topics in Early Childhood Special Education, 10 (1), 16 - 35.

Ms. Deal indicated that she was uncertain if further data analysis on the Family Functioning Style Scale (FFSS) had occurred since this article was published, and I should speak further with you.

I would greatly appreciate it if you could send me any recent analysis you have. I am particularly interested in the percentage of variance in item scores for the separately completely versus completed together group.

I have enclosed a previous letter I sent to you in January 1993 which provides information about my interest in the FFSS.

Thank you for your assistance.

Sincerely,

Holly Charles, BSW
Social Worker

Appendix R

Correspondence from Dr. C. Trivette

**CENTER FOR FAMILY STUDIES
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Morganton, NC 28655**

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Number of Pages, including cover sheet: 11

Message: (in press) C. J. Dunst, C. M. Trivette,
& A. G. Deal. Supporting and ~~also~~ Strengthening
Families (Vol. 1): Methods, Strategies and
Practices. Cambridge, MA: Brookline Books,