CANADIAN THESES

THÈSES CANADIENNES

NOTICE

The quality of this microfiche is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this film is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30.

AVIS

La qualité de cette microfiche dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, examens publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de ce microfilm est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30.

THIS DISSERTATION
HAS BEEN MICROFILMED
EXACTLY AS RECEIVED

LA THÈSE A ÉTÉ
MICROFILMÉE TELLE QUE
NOUS L'AVONS REÇUE

THE UNIVERSITY OF ALBERTA

RELATIONSHIP BETWEEN FAMILY LIFE EVENT DEMANDS, FAMILY COPING AND BEHAVIOR PROBLEMS IN CHILDREN

by

© MARGARET ELLEN LOCK

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF NURSING

FACULTY OF NURSING

EDMONTON, ALBERTA

Fall, 1986

ISBN 0-315-32408-2

UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR Margaret Ellen Lock

TITLE OF THESIS RELATIONSHIP BETWEEN FAMILY LIFE EVENT DEMANDS, FAMILY COPING AND BEHAVIOR PROBLEMS IN CHILDREN

DEGREE MASTER OF NURSING

YEAR THIS DEGREE GRANTED FALL, 1986

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

Signed: M.E. Lock

Permanent Address

Box 417, Vilna, AB

T0A 3L0

Dated Nov 25/86

APPENDIX G

UNIVERSITY OF MINNESOTA
TWIN CITIES

Family Stress and Coping Project
Department of Family Social Science
275 McNeal Hall
St. Paul, Minnesota 55108
(612) 376-8135

February 19, 1985

Ms. Peggy Lock
Box 47
Site 15
RR 5
Edmonton, Alberta
CANADA T5P 4B7

Dear Ms. Lock:

I am pleased to give you permission to use F-COPES -- Family Crisis Oriented Personal Scales and FILE -- Family Inventory of Life Events and Changes in your study on families that have children with behavioral problems.

I have included a copy of the scoring manual as well as some additional reprints. Also, I have enclosed an order form. You may order these instruments directly from the Family Stress Project or, if you prefer, you may reproduce them yourself.

If I can be of any further assistance, please feel free to write or call.

Sincerely,

Hamilton I. McCubbin
Professor

HIM:sr-j
encl.

APPENDIX H

UNIVERSITY ASSOCIATES IN PSYCHIATRY, INC.

1 South Prospect St.
Burlington, VT 05401

Administrative Office
(802) 656-3270

Ambulatory Clinics
(802) 656-4560

Behavioral Medicine and Consultation Service
Hospital (802) 656-3270
Outpatient (802) 656-4560

Center for Children, Youth and Families
(802) 656-4563

Central Vermont Division
(802) 229-0303

Crisis Services of Chittenden County
(802) 656-3587

Forensic Service
Adult (802) 656-3270
Child (802) 656-4563

Inpatient Admissions
(802) 656-3937

Neurosciences Research Unit
(802) 656-3270

May 30, 1986

Mrs. Margaret E. Locke
Box 41 Site 15 RR5
Edmonton, Alberta
Canada T5P 4B7

Dear Mrs. Locke:

This is to certify that I have given you permission to use Child Behavior Checklist materials purchased from University Associates in Psychiatry in your thesis research.

I am enclosing information on the current status of these materials for appropriate citation.

Sincerely yours,

Thomas M. Achenbahch Ph.D.
Professor & Director
Center for Children, Youth,
& Families

TMA:je

Enc.

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled RELATIONSHIP BETWEEN FAMILY LIFE EVENT DEMANDS, FAMILY STRESS AND BEHAVIOR PROBLEMS IN CHILDREN submitted by Margaret Ellen Lock in partial fulfilment of the requirements for the degree of MASTER OF NURSING.

.....

Supervisor

.....

.....

Date.....

DEDICATION

I would like to dedicate my thesis to a lady who knew the true meaning of "FAMILY". KATHY PETRIE's abilities to [illegible] roles of daughter, sister, wife, mother, grandmother, and friend were exceptional. She will never be forgotten by the many children who came to her when they needed her love, support and understanding.

ABSTRACT

The purpose of this correlational descriptive study was to examine the relationships between family life event demands (family stress), family coping and behavior problems in children. A convenience sample composed of forty families who had children admitted to one of two pediatric psychiatric assessment units was used for this study. The Double ABCX Model of Family Adaptation (McCubbin & Patterson, 1981) provided the theoretical framework. Data was gathered using the Family Inventory of Life Events and Changes (McCubbin, Patterson & Wilson, 1981), Family Crisis Oriented Personal Scales (McCubbin, Olson & Larson, 1981) and the Child Behavior Checklist (Achenbach & Eldebrock, 1983). Statistically significant correlations between the composite measures of the three variables of interest were not obtained. Further analysis using central tendency and frequency measures did provide substantial amounts of information describing these relationships. Results suggest that as family stress increases, family coping decreases and children's behavior problems increase. Families used different types of coping strategies to deal with different types of childhood behavior problems. The amount of stress, numbers and types of coping strategies used and numbers of negative behaviors demonstrated by children showed considerable variation among families. Information of value is provided to nurses caring for families of children with behavior problems in both hospital and community settings.

Information provided by this research will assist nurses to gain a better understanding of why some families can successfully participate in their children's therapeutic regimes while other families become totally immobilized and simply cannot cope with the additional demands of caring for children with behavior problems.

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the guidance, cooperation and support provided to me by a great number of people. Firstly, I would like to expresss my sincere gratitude to Dr. Elizabeth Davies, my committee chairman, for her never ending patience, guidance and support. To my other committee members, Dr. Janet Kerr and Dr. Brenda Munro, thanks so much for their most valuable input particularly with regards to research methodology and statistical analysis. Because of the dedication of my committee members, this project was a most worthwhile learning experience for me.

A very special thank-you must go to my family, Graham, Heather and Bob. Yes, there really is a Mom at your house. She really loves you and appreciates all of your help. I surely did need all of you to keep the home fires burning.

Data collection and completion of this project would not have been possible without the cooperation and most valuable assistance provided by the hospitals and nursing unit personnel. The cooperation of the forty families who took time out of their busy lives to fill out the study questionnaires was greatly appreciated.

Thank-you to the Alberta Foundation for Nursing Research and to the Alberta Association of Registered Nurses for the research grants which were used to finance this study.

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I

Introduction

All families experience stress as they strive to meet the ever changing but normal developmental needs created by both individual members, and the family unit across their life spans. Some families experience additional stress related to the occurrences of non-normative or unexpected life events. Families of children with behavior problems serve as examples of families who may experience stress exceeding normal developmental levels. Not only do these families have to cope with their children's disruptive and unpredictable behaviors, they must also deal with the multitude of problems created by these behaviors. The abilities of families to successfully meet challenges presented by constantly changing life situations are dependent upon their coping abilities, which, in turn, depend upon availability of internal and external family resources.

Chronic behavior problems of childhood are among those long term physical and psychosocial illnesses being incorporated into home care programs. These programs provide cost effective and humane methods of treatment for children with behavior problems and their families. Consequently, families of children with mild to moderately severe behavior problems are frequently expected to be responsible for maintaining a therapeutic milieu for their children at home. In addition, these families are encouraged to participate in their children's educational programs as well as become involved with their children in normal community activities. The educational

system advocates mainstreaming or placing problematic children into regular classrooms rather than segregating them into special classes (Guralnick, 1976). The purpose of mainstreaming is to allow children with physical and/or psychosocial disabilities the opportunity to be in contact with normal children who serve as behavioral role models. These attempts to normalize children's problematic behaviors may create additional strains for families, especially if children's disruptive and unpredictable behaviors result in rejection rather than acceptance by other children and adults (Blacher & Turnbull, 1983; Silverman, 1979).

When children's behaviors become problematic at home or at school, formal assessment on a pediatric psychiatric unit may be required. The abilities of families to cope not only with their children's behaviors but also with the therapeutic regime prescribed by the health care team will be influenced by a variety of factors. These factors include the rate of onset and severity of children's behaviors (Lipowski, 1970), ages of children (Mash, 1984), family developmental stage and associated normative stressors. In addition, families must cope with other non-normative (unexpected) life events as they occur (Olson, McCubbin, Barnes, Larsen, Muxen & Wilson, 1983). Supervised home based therapy can improve problematic behaviors in children and can increase educational achievement. Short term outcomes of these programs have been described, but long term effects on children's problematic behaviors and families' adaptation to these programs have not been well documented (Winsberg, Bailer, Kupietz, Botti & Balka, 1980). Nurses are

frequently involved in both assessment and treatment phases of providing care for families of children with behavior disorders. Such involvement is particularly true for community health nurses who frequently act as mediators between the family and the many professionals involved in providing health and educational guidance.

Adaptation theory provides an alternative to the traditional medical model which tends to result in provision of standardized and stereotypic interventions with little consideration for unique needs of singular family units. Stereotypic interventions may only serve to provide additional stress for families whose demands already -- exceed their physical, psychosocial and economic resources (Cronenwett & Brickman, 1983; McCubbin & Patterson, 1981). The medical model does not easily lend itself to provision of nursing interventions which must be altered in order to meet different and ever changing needs of individual families. Some families of children with behavior problems may function well even though they are experiencing extreme stress. At other times, families may simply fall apart under minimal threat to the family system. Stress and coping theory have potential for helping to explain why these family differences occur. In addition, this theory provides a basis for family assessment and establishment of realistic care plans which assist families to care for their problematic children at home.

Development of Problem and Study Rationale

Prevalence rates of behavioral/emotional problems in school populations have been reported in literature as varying from 2-49%

but the rate most commonly cited is 8-10% (Csapo, 1981; Links, 1983; Stott, 1978). Based upon statistics received from a Western Canadian urban school board (Personal communication, September, 1985) and using the prevalence rate of 10%, it could be expected that approximately 10,000 school children in the city in which this study was conducted either have or will develop some form of behavioral/ emotional problems during their school experience.

Most often, behavior problems are not identified until children reach school age although, it has been demonstrated that many children who are problematic during early school years, have also demonstrated these same behaviors as early as three years of age (Prior & Leonard, 1983). This delay in identification and treatment can be detrimental to normal growth and development of affected children as well as to their families (Lurie, 1970, 1974). These children may never regain what is lost in educational and psychosocial development (McGee, Silva & Williams, 1984; Robins, 1983). Furthermore, these families may suffer many years of undue stress created by their children's untreated behavior problems. This stress may well have long term negative consequences for the family unit and/or for other individual family members (Holmes & Rahe, 1967).

Many families with pre-school children exhibiting behavior problems do not seek the assistance of professional counsellors. In some families, children's disruptive, negative and uncontrolled behaviors are simply accepted and tolerated. Perhaps these families do not perceive their children's behaviors as creating significant

threats to the stability of their family units. Other families may recognize that their children's behaviors are unacceptable and that these behaviors do cause a great deal of stress for their families. Nonetheless, they may refrain from obtaining professional assistance because of their lack of knowledge of available community resources. Other families may fear rejection due to societal stigma which often occurs when a child and his family are labelled as deviant (Goffman, 1963). Once children reach school age, their deviant behaviors are neither accepted nor tolerated by other children or by teachers in the school setting. At this time, referrals may be made by teachers to educational or medical professionals for formal assessment and treatment of behavior problems.

Mass screening for behavior problems among pre-school children is not routinely carried out in Canada. Many of the screening tools which have been considered as potentially useful for assessment of children's behaviors lack reliability and validity (Csapo, 1981). Without instruments which accurately identify behavior problems, screening programs are not economically or ethically feasible due to subsequent increased economic and emotional costs associated with high false diagnosis rates (Mausner & Kramer, 1985). Several health units in Canada have included items related to childhood behaviors behaviors on questionnaires parents are asked to complete during children's preschool assessments. Specifically, these items ask if children demonstrate behaviors such as fighting, temper tantrums or hyperactivity. When parents express concern regarding their children's behaviors, the issue may be pursued by a community

health nurse, in which case, a referral is made to a family physician or to a related community agency.

Accurate assessment is the foundation upon which realistic and effective nursing interventions are based (Erickson & Swain, 1982). Researchers have suggested that coping and adaptation theory may provide an effective framework for guiding accurate assessment of all families including those families of children with behavior problems (Marcus, 1977). This framework allows nurses to evaluate psychological, sociological, biological and physical stresses experienced by families as well as to identify family strengths including effective family coping and resource utilization. These resources serve to reduce the effects of stress upon normal family functioning. Researchers have demonstrated that when individuals and families experience an accumulation of normative family life cycle stressors and non-normative or unexpected stressors, the health of individual family members or total family units may be affected (Holmes & Rahe, 1967). This notion of stressor accumulation within the family unit has been shown to be predictive of changes in the health of children with other kinds of problems, for example, the pulmonary function status of children with cystic fibrosis (Patterson & McCubbin, 1983). Family stress accumulation also is associated with the development of behavior problems in children (Gersten, Eisenberg, Orzeck, 1974). A prospective study which compared behavior changes in children to numbers of life event changes occurring over a three year period, demonstrated that for

children under the age of three, accumulation of family life events is associated with negative childhood behaviors (Beautrais, Fergusson & Shannon, 1982).

Health promotion or illness prevention is the primary goal of community health nursing. In order for community health nurses to identify families at risk for having a child develop behavior problems or to identify childhood behavior problems prior to school entry, a valid screening instrument must be developed. Researchers have identified factors such as socioeconomic status, broken homes and parent-child relationships to be associated with behavior problems in children (Rutter, 1985). However, these factors do not explain why family stability and general well-being of individual members can vary greatly among families even though family life circumstances are very similar. Furthermore, few researchers have been able to isolate and provide quantitative measures of the effects of individual family variables upon family stability and health.

The first step in the development of a screening protocol for identification of families at risk relative to the development of behavior problems in children is to isolate measurable characteristics or conditions common to families of children with behavior problems. Based upon clinical observations and literature reviews, the researcher felt that it was quite possible that family stress and coping measures had potential for identifying families at risk of having children who may develop behavior problems. The general purpose of this study was to utilize a family stress and

coping framework in order to describe family life event demands (family stress) family coping patterns in families of children with behavior problems.

Purpose of the Study

The specific research question guiding this study was: What are the relationships between accumulation of family life event demands, family coping and behavior problems in children?

The specific research objectives were:

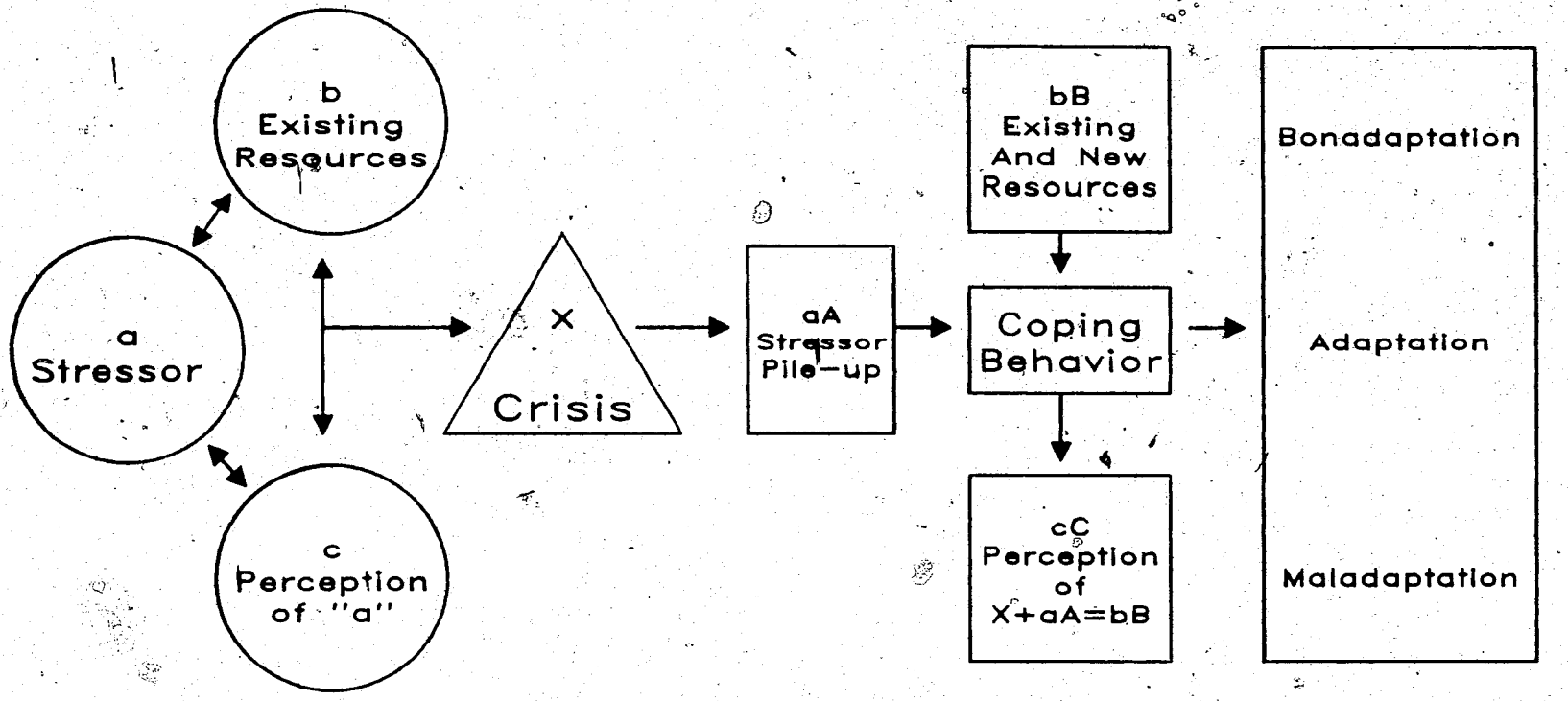
1. To examine the relationship between accumulation of life event demands in families of children with behavior problems and coping behaviors utilized by these families.
2. To examine the relationship between coping behaviors utilized by families of children with behavior problems and their children's behaviors.
3. To examine the relationship between accumulation of life event demands in families of children with behavior problems and their children's behaviors.
4. To identify and describe types of behaviors demonstrated by children being assessed for behavior problems.
5. To identify normative and non-normative life event demands experienced by families of children with behavior problems.
6. To identify coping behaviors utilized by families of children with behavior problems.

Theoretical Framework

The Double ABCX Model of Family Adaptation (McCubbin & Patterson, 1981) provided the theoretical framework for examining the relationships between family life event demands, family coping and behavior problems in children. The Double ABCX Model is based upon the work of Reuben Hill (1958). Hill's ABCX Model of Family Stress was developed to study families separated and reunited during war time. This pre-crisis model states that the interaction of three factors: A factor (the stressor event), B factor (the family crisis meeting resources) and C factor (the definition the family makes of the event) determines whether families will successfully adapt to their life conditions or will end up experiencing crisis situations (X factor) (see Table 1).

McCubbin & Patterson (1981) added the post-crisis dimension to Hill's model (1958) (see Figure 1). These researchers based the Double ABCX Model on the assumptions that family adaptation is a dynamic process occurring over time and that all families continually encounter stressors. Stressors are defined as " life events or occurrences(s) ... which produce(s) change in the family social system" (McCubbin & Patterson, 1981, p. 7). This definition is consistent with family systems theory which states that any change within a family unit will eventually affect all members of the family. These changes may involve any aspect of family structure and/or function. For example, when children are admitted to a pediatric/ psychiatric assessment unit, many changes

Table 1: THE DOUBLE ABCX MODEL OF FAMILY ADAPTATION
(McCUBBIN & PATTERSON, 1981)



Hill's (1949) Pre-Crisis ABCX Model

McCubbin & Patterson – Post-Crisis Phase of Adaptation

Permission to use the Double ABCX Model of Family Adaptation and the FILE and F-COPES instruments develop for use with this model obtained from Dr. Hamilton McCubbin (see Appendix G).

must be made within the family system in order for families to successfully meet additional demands created by the behavioral programs established by health care professionals. Family boundaries must expand in order to include those professionals working with family units. Changes in family interaction, and/or family roles and rules may be necessary to facilitate decreases in children's problematic behaviors. Changes created by life event demands may cause stress for families, particularly if families do not have the psychological, sociological or material resources necessary to facilitate change. McCubbin & Patterson (1981) refer to this phenomenon as a demand-capability imbalance. This imbalance may result in distress if families perceive this change process to be very difficult or in some cases to be totally impossible. In other words, family distress occurs only when resources are unavailable or when resources are not utilized. In these cases, families may become totally incapacitated by stress resulting from life demands. Extreme distress may result in family crisis defined as the "amount of disruptiveness disorganization, or incapacitatedness in the family social system" (Burr, 1973, cited in McCubbin & Patterson, 1981, p.8).

The concept of stressor-pile up is a major component of the Double ABCX Model. This model portrays families experiencing multiple stressors or demands simultaneously. Hospitalization of children for assessment of behavior problems may be defined as a stressor since changes in family systems must occur if families are to participate successfully in assessment and treatment processes.

At the same time, these families are striving to meet normative family life cycle demands such as having children enter school or the birth of an infant. In addition, families may be experiencing unexpected or non-normative events such as loss of jobs, transfers to new localities, or sudden deaths in families. Coping responses made by families in response to these stressors may also add to family stress. For example, if a mother quits her job in order to follow a behavior modification program with her child at home and/or at school, the family may face financial problems due to loss of income. Some coping behaviors such as excessive intake of food and non-food substances such as alcohol may also negatively affect families these behaviors become a source of family stress.

McCubbin & Patterson (1981) allude to the concept of social ambiguity. Such ambiguity is experienced by families during children's hospitalization for assessment of behavior problems since families are often uncertain as to their roles in the treatment of their children. In addition, families are often concerned about reactions of extended families, friends and communities to their children's hospitalization on a psychiatric unit.

When family stress levels become very high (stressor pile-up), families become more vulnerable to the effects of any additional demands made upon the family system. In other words, regenerative powers (Burr, 1973) or abilities to make adaptive changes decrease. It is vital that nurses take such situations into consideration when caring for families of children with behavior problems. If families are already experiencing excessive stress, it is unrealistic to

expect them to successfully carry out behavioral regimes with their children at home without provision of additional resources.

Family coping " includes the behavioral responses of family members and the collective family unit to eliminate stressors, manage hardships of the situation, resolve intra-family conflicts and tensions, as well as acquire and develop social, psychological and material resources needed to facilitate family adaptation " (McCubbin & Patterson, 1981, p.14). The Double ABCX Model depicts families adjusting to multitudes of demands by utilizing resources available within the family unit and from the community.

Family perception considers how families view their total life situations. Families who believe they have adequate resources to cope with their problems are more likely to maintain a state of equilibrium than families who believe they can not cope with family demands. Parental perceptions of children's behaviors provide information indicating whether additional demands are created by children's negative behaviors. If parents perceive that their children frequently exhibit large numbers of negative behaviors, the impact of children's behavior problems upon these families will be much greater than if children's negative behaviors are perceived as being minimal and infrequent.

The Double ABCX Model of Family Adaptation takes into consideration aA (stressor pile-up), bB (existing and new resources used by families), and cC (family perception of their total life situation) in an effort to explain why some families adapt to life

demands and others do not. For the purposes of this study, only a portion of the Double ABCX Model was utilized: family demands (aA factor) and family coping strategies. The concepts and variables included in this study and methods of measurement are outlined in Table 2 (see Table 2).

Operational Definitions

Family: A group consisting of the child who is admitted for assessment to a pediatric psychiatric unit, the adult(s) who fulfill the role of parent(s) for the child, and other siblings.

Behavior Problem: Parental perception of social competencies and negative conducts of their children as measured by the Child Behavior Checklist.

Family Life Event Demands: The total number of life changes experienced by a family, or the associated weighted stress scores, as measured by the Family Inventory of Life Changes.

Family Coping Behaviors: The activities utilized by a family to reduce the effects of stressful life events as measured by the F-Copes questionnaire.

Hypotheses

1. Accumulation of life event demands is related to coping behaviors in families of children with behavior problems.
2. Accumulation of life event demands is related to parental perception of their children's behaviors.

3. Coping behaviors utilized by families of children with behavior problems are related to parental perception of their children's behaviors.

Table 2.

Measurement of Variables

Concept	Variable	Instrument	Author
Children's Behaviors	Parental Perception of Children's Behaviors	CBCL	Achenbach & Edelbrock, (1983).
Stress	Family Life Event Demands	FILE	McCubbin, Patterson, Wilson, (1981).
Coping	Family Coping	F-COPES	McCubbin, Patterson, & Larsen, (1981).

CHAPTER II

Literature Review

Chapter II provides a review of literature dealing with the development and maintenance of behavior problems in children, stress experienced by families related to developmental and circumstantial life event demands including children's behavior problems, and coping strategies utilized by families.

Behavior Problems in Children

Definition and Classification

Theoretical definitions of childhood behavior problems have been established for the purposes of providing standards for guiding clinical diagnoses. In addition, empirical definitions have been proposed for utilization in research. The American Psychiatric Association (Diagnostic and Statistical Manual of Mental Disorders - DSM III, 1980) provides inclusion and exclusion criteria for use in clinical identification of behavior problems of children. This general category is further divided into sub-groups based upon children's abilities to have meaningful social relationships with others and whether or not aggressive behavior is demonstrated. Although DSM III classifications attempt to provide standardized diagnostic criteria, however these criteria do not provide emp measures of behavior problems which are required for use in research.

Empirical measures of behavior disorders closely paralleling DSM III criteria were developed by Achenbach & Edelbrock (1978).

Their criteria were based upon a study comparing behaviors of a non-clinical sample of children and a group of children being treated for psychiatric disorders. These researchers classified hyperactive, aggressive and delinquent behaviors of children into a broad-band grouping of behaviors referred to as Externalizing Behaviors. In contrast, less visible behaviors such as those behaviors related to schizoid, depressed, uncommunicative and obsessive compulsive traits as well as somatic complaints are referred to as Internalizing Behaviors. A similar system was developed by Quay (1979) based upon data received from teachers, parents and problem children. Quay described disturbed behaviors of childhood as conduct disorders, personality disorders, immaturity and socialized delinquency. Conduct disorders include behaviors such as fighting, temper tantrums, distractability, disobedience, negativism, restlessness, hyperactivity, dishonesty, stealing and distruction of property. For the purposes of this study, the term "behavior problems" was used.

It has been suggested that children with behavior problems are more disturbing to those who care for them than these children are actually psychologically disturbed (Gresham, 1982). These children demonstrate problematic behaviors which tend to be inappropriate for their age and/or sex and are frequently situationally inappropriate and/or violate the rights of others (DSM-III, 1980). Differentiation between clinically significant behavior problems of childhood and normal negative developmental behaviors is based upon relative increases in frequency, duration and intensity of children's

negative behaviors (Csapo, 1981). The Child Behavior Checklist developed by Achenbach & Edelbrock (1983) provides sex and age specific measures of childhood behaviors making it possible to empirically measure and differentiate between clinically significant negative behaviors of children and normal developmental behaviors.

Prevalence

The prevalence rate (total number of cases reported in a given population) of behavior problems of children is unknown. Estimates vary from 2-49% of the school population (Csapo, 1981). This large variation in prevalence rates may be attributed to a lack of standardized criteria used for defining and measuring behavior problems of children. Research methodological issues such as use of instruments lacking in validity and reliability, small sample sizes which are not representative of the general population, and/or use of samples in which children's ages are significantly different contribute to this variance (Links, 1983).

Factors Related to the Development of Behavior Problems

Children's individual traits and family environmental characteristics have been described as being positive factors serving to protect some children from effects of hostile environments and consequently allowing them to progress normally through the developmental stages of childhood. Other factors including parenting practices related to social class norms and

dysfunctional parent-child relationships, have been identified as being related to the development and maintenance of behavior problems of children.

Individual Characteristics of Children

Differentiation between effects of individual attributes such as genetic (Rutter, 1985) or gender (McGee, Silva & Williams, 1984) traits, from environmental effects upon a human population such as children who have behavior problems is most difficult. Furthermore, it is not ethically feasible to deliberately alter environments within which children are nurtured for purposes of research. However, a longitudinal study of 600 children living on the island of Kauai resulted in identification of several factors shared commonly by children who developed into normally adjusted adults in spite of being reared in a state of poverty (Werner & Smith, 1977). These protective factors include being the eldest sibling, having high levels of activity during infancy, being good natured and/or being responsive to others during early childhood years.

There is a higher incidence of reported behavior problems in boys than girls (DSM-III, 1980; McGee, Silva & Williams, 1984). This finding may be related to several factors, for example, disruptive and immature behaviors are more common in boys. In addition, these overt types of behaviors are more visible and perhaps more difficult for families and teachers to cope with. Consequently, boys are more likely to be referred for treatment than are girls because typically, girls tend to exhibit more passive and withdrawn

behaviors which are less visible and less difficult for some families to cope with (Werry & Quay, 1971).

Family and Environmental Factors

Family characteristics appearing to prevent children from developing behavior problems even though they live in negative environments, include having fewer than four children per family and maintenance of close parent-child relationships (Werner & Smith, 1977). Availability of adequate external support systems and use of effective family coping serves to protect individuals and families from negative effects of the environment (Olson, McCubbin, Barnes, Larsen, Muxen & Wilson, 1983). Family characteristics such as social class, alternate family types, and negative parent-child relationships have been identified as risk factors which may influence the development of many family difficulties including development of behavior problems in children.

Social Class

Each social class has a different set of norms and values to which children are socialized (Susser, Hopper & Richman, 1983). Lower socioeconomic families characteristically value obedience and tend to conform to rules initiated by sources external to the family unit (Tucker, 1978). However, children with behavior disorders are frequently disobedient and often defy authority. Such behaviors challenge the rigid patterns of expected family behaviors in this group of families. Lower socioeconomic parents parents are often

reluctant to seek help even when children's behaviors are excessive and create havoc within the family unit. This characteristic may be related to lack of parental confidence in the medical profession or to their lack of knowledge regarding available community resources. Other parents may simply attribute their children's behaviors to their life conditions, in which case, they may believe that nothing can be done (Lurie, 1974). Most children from lower socioeconomic families are referred for assessment and treatment of behavior problems by individuals outside the family unit such as school teachers, family friends, family doctors or law enforcement agencies.

It has been shown that middle socioeconomic parents value self-directive behaviors in children and encourage individual growth and development. In addition, parental expectations for children's achievements tend to be very high. These expectations may intensify parental reactions to negative behaviors exhibited by children and may explain why middle socioeconomic parents tend to bring their children to outpatient clinics for assessment of behavior problems at an earlier age than do lower socioeconomic parents (Baker & Wagner, 1966).

It has been clearly documented that there is a higher incidence of social, emotional and psychological problems within lower socioeconomic adult populations (Hollingshead & Redlick, 1958; Dohrenwend & Dohrenwend, 1970). However, the correlation between behavior problems in children and social class appears to be a case for debate. Achenbach & Edelbrock's (1979) study of 450 clinical

and non-clinical children revealed that within this sample, the relationship between childhood behavior problems and social class was not significant. However, it has been reported that, in Canada, there appears to be a direct correlation between family income and the incidence of behavior problems in children (Csapo, 1981). Lurie (1974) found that there was a higher incidence of mental health problems in New York state children whose family incomes were low. Regardless of social class, parents are more likely to seek help for their oldest children's problematic behaviors. This practice is possibly due to increased anxiety resulting from either lack of experience or inadequate parenting skills (Tucker, 1978).

Single Parent Families

A higher incidence rate of children with behavior problems has been reported in alternate family types such as single parent families (Stott, 1978). Since most single parent family heads are women, this higher incidence may be related to their lower income status, lack of resources and strained parent-child relationships due to increased responsibilities and stresses experienced by single parents.

Parent-child Relationships

The development and maintenance of children's behavior problems may be partially explained by the reciprocal nature of parent-child relationships. At approximately three years of age, most children exhibit developmentally normal negative behaviors. By five to six

years of age, these behaviors tend to decrease in intensity and frequency (Whaley & Wong, 1983). However, these normal developmental behaviors can be problematic for some parents. A study of 153 Toronto mothers indicates that preschool children's contrary and stubborn behaviors are major maternal concerns. Negative responses such as anger and yelling were coping responses frequently reported by mothers included in this study (Brailey, 1984). Laboratory studies of families with children identified as having behavior problems demonstrate that negative behaviors of children tend to elicit negative (Mash,1984) and more controlling (Aragona & Eyberg, 1981) parental behaviors. Children in turn, may respond to negative parental behaviors with increased negativism and aggression, thus completing a coercive cycle. If this cycle is allowed to continue, severe family dysfunction may result. In addition, it has been shown that when dysfunctional relationships exist between parent and child, parents may continue to react negatively despite considerable improvement in children's behaviors (Lewin, Nelson & Tollefson, 1983).

Children's behavior problems may serve a functional purpose for unhealthy families. In order to reduce tension and avoid dealing with more serious problems involving greater emotional costs for families such as parental conflicts, attention may be transferred to children with behavior problems. This practice is referred to as scapegoating (Vogel & Bell, 1960) or triangling (Smith, 1978) and may serve to preserve family unity. In addition, provision of

negative reinforcement to children with behavior problems encourages continuation and possible escalation of problematic behaviors.

In all families, there are both positive and negative factors relating to prevention or development of behavior problems in children. Researchers have clearly indicated that professional health care workers, including nurses, must not rely totally upon statistical inferences which may result in stereotypic interventions. For example, it has been shown that behavior problems in children are more prevalent in lower socioeconomic class families. It is not, however, valid to assume that all children from low socioeconomic families will develop behavior problems. Accurate assessment of families is necessary in order for health care workers to identify both negative and positive family characteristics. Total families must be taken into consideration if treatment of children with behavior problems is to be successful.

Family Stress

The study of man interacting with the environment in order to maintain or regain a sense of stability has attracted the attention of researchers from many disciplines. This multidisciplinary interest contributes to the great variation found in literature regarding conceptualization of factors contributing to this adaptation process and to the diverse methodological approaches used to study this phenomenon.

Traditionally, stress and coping studies have focused upon immediate individual responses to situationally specific and

extremely stressful events such as children with leukemia (Friedman, Chodoff, Mason & Hamburg, 1963), patients with poliomyelitis, (Visotsky, Hamburg, Goss & Lebovits, 1961), coping with acute grief (Lindemann, 1977) or patients recovering from surgery (Lazarus & Cohen, 1973). A relatively uncommon area of study is the investigation of how individuals (Pearlin & Schooler, 1978; Folkman & Lazarus, 1980) or families (Olson et al, 1983) cope with problems related to normal life events such as marriage, parenting and work-environments. Olson et al (1983) used a developmental framework to study stress and coping patterns within family units. Normative family stress scores were developed to provide numerical representation of family changes or family stress across various family life cycle stages. This developmental pattern indicates that families with school aged children frequently experience stress related to intra-family strains, work-family strains and finances. Families of children with behavior problems may well experience similar types of stress but amounts of stress these families experience may be intensified by their children's negative behaviors.

Definition of Stress

Researchers and theorists do not agree on the definition of stress. Physiological and psychological approaches have been used to describe how individuals react to stressful situations, whereas, family focused research has tended to utilize a sociological approach.

Individual Stress

In the 1940's, Selye (1977) defined stress in medical physiological terms. His General Adaptation Syndrome (GAS) describes human tissues responding to stress with increased blood flow, heart rate and endocine hormonal excretion. The three phases used to describe this physiological response are alarm, resistance and exhaustion. This 'fright or fright' reaction to external stimuli depicts stress as being a threat to human existence. This physiological approach, though beneficial in providing information regarding responses of individuals to stress, has somewhat limited use for studying family adaptation.

A psychological approach was used to study stress and coping by researchers such as Folkman and Lazarus (1980) and Pearlin and Schooler (1978). These researchers maintain that the intensity of emotional impact created by a stressful event is dependent upon individual's cognitive appraisal of a situation. During the primary appraisal phase, individuals decide whether or not situations are non-threatening, a potentially harmful threat to their well-being, or simply challenges which can be overcome with minimal difficulty. Secondary appraisal involves evaluation of total situations with regard to appropriateness and availability of resources including coping behaviors. Reactions of individuals to non-threatening situations may be minimal. Individuals' coping responses to threatening or challenging situations basically serve to change or eliminate difficult situations or decrease emotional impacts created by stressful events. This psychological methodology has been

effectively utilized in research describing how individuals cope with stress. However, these studies are limited to individual adaptation and do not include the family as a primary unit of analysis.

Sociologists, especially those who utilize systems theory, study families within the context of their environments. Families are composed of several interacting individuals who present their families with unique sets of problems which may result in family stress. In addition, these same individuals make unique contributions towards preservation of family unity.

Family stress is believed to be unavoidable (Holmes & Rahe, 1967), and may serve both negative and positive functions within the family unit. Hill (1949) defined stress as a "function of the response of the distressed family to a stressor and refers to the residue of tensions generated by a stressor which remains unmanaged" (cited in McCubbin,Joy, Cauble, Comeau, Patterson & Needle, 1980, p.857). This definition tends to emphasize the negative aspects of stress. Researchers have shown that high levels of stress related to life events are predictive of individual illnesses (Holmes & Rahe, 1967), decreased measures of pulmonary function in children with cystic fibrosis (McCubbin & Patterson, 1983) and are associated with the development of behavior problems in children (Griest, Forehand, Wells & McMahon, 1980; Fergusson, Horwood, Gretton & Shannon, 1985). Factors such as increases in the intensity, frequency and duration of stress (Hetherington, 1984), ambiguity created by stressful events (Matteson & Ivancevich, 1982) and lack of available resources

(Dohrenwend & Dohrenwend, 1970) also contribute to negative consequences of stress. Family stress may be related to normal developmental occurrences such as the birth of a baby (Dunn & Kendrick, 1980) or unexpected events such as having a child who develops leukemia (Friedman, Chodoff, Mason & Hamburg, 1983), the birth of a handicapped child (Zamerowski, 1982) or hospitalization of a child (Hinz, 1980; Godfrey, 1955).

A more positive function of stress related to normal family development is described by McCubbin & Patterson (1981). Stress is described as a state arising from a demand-capability imbalance within the family unit. In order for families to correct these states of imbalance produced by individual family members, the family unit or the surrounding environment, adjustments must be made in family behaviors, roles, rules, values, goals or boundaries. These changes are required so that constantly changing needs of growing families may be met and normal family growth may occur (Friedman, 1981). For the purposes of this paper, the terms "family life event demands" and "family stress" will be used interchangeably.

Family Stress Created by Children's Behavior Problems

A great deal of research has been carried out in order to determine the effects of the family environment upon development of behavior problems in children. Considerably less research has been directed toward providing a better understanding of how children's behaviors affect their families. The amounts of distress experienced

by families in relation to children's behaviors may be associated with the amount of difficulty families experience while coping with children's behaviors on a day to day basis (Bell, 1981). Children who exhibit behavior problems are disruptive in the classroom (Lewin, Nelson & Tollefson, 1983) and/or in the home (Mash, 1984). In addition to being involved with the results of children's disruptive classroom behaviors, families may also have to deal with their children's poor academic performances. In many instances, lack of scholastic achievement is not related to lack of ability since many children with behavior problems also have normal intelligence. In other words, there tends to be a discrepancy between measured intellectual capability and observed academic performance (Robins, 1983).

Children's behavioral disabilities may become a tremendous handicap for families. Family decisions to relocate, go on holidays or take part in normal family or community activities are dependent upon whether families perceive that their family units and society in general can cope with these children's abnormal behaviors. Some families may have to live near the facilities providing treatment for their children making career changes and family relocation impossible. Other families may fear or actually experience negative responses from other family members and from members of their communities. If families are unable to cope with these negative reactions, they may withdraw and become socially isolated from extended families, friends and community associations (Zamerowski, 1982). In these instances, parent-child relationships with siblings

of disturbed children may become strained. These strained parent-child relationships may be intensified by increased amounts of parental time required by the disturbed children.

There is a significant amount of evidence to suggest that negative behaviors of children affect the total family unit. Research has clearly indicated that because of the reciprocal nature of children's and families' behaviors, total families must be taken into consideration when treatment of children's behavior problems becomes necessary.

Vulnerability of Families

The notion of negative and positive family responses to stress can be related to the concept of vulnerability or the amounts of resistance families have for the purposes of combating stress (Burr, 1973). This concept of vulnerability is somewhat circular in nature. Vulnerable families are more susceptible to disruption and disrupted families are more vulnerable to stressors (Hansen & Johnson, 1979).

If families are to meet demands created by stressful events and continue to maintain a sense of family independence, stability or wellness, resources must not only be available but they must be effectively utilized (Neuman, 1982). The mediating or protective effects of social support (Cobb, 1976; Dean & Lin, 1977), socioeconomic status (Dohrehwend & Dohrenwend, 1970), family cohesion and adaptability (Olson et al, 1983) have been well documented. For example, it has been demonstrated that adequate social support networks can decrease the incidence of illness and

increase recovery from illness (Cobb, 1970) as well as reduce threats related to normal life event changes experienced by families (Hamburg & Adams, 1967).

Families who attempt to maintain closed systems by strictly maintaining family boundaries, effectively limit interaction with the environment. Consequently, resource availability is reduced. Families who attempt to avoid change at all costs are considered to be dysfunctional (Sonne, 1967). These isolated or disturbed families are more likely to experience crisis situations defined by Hill (1949) as "the degree of incapacitatedness or disorganization experienced when family resources are inadequate or depleted" (cited in McCubbin & Patterson, 1981, p. 149). Families who have adequate coping resources are more likely to view stressors as challenging and will experience positive psychological growth and development due to successful stressor adaptation (Hansen & Johnson, 1979; Baker & Cook, 1983).

Measurement of Family Stress

Various approaches have been taken to measure family stress including: measurement of major life event stressors (Homes & Rahe, 1967), minor life event stressors (Folkman & Lazarus, 1980; Kanner, Coyne, Schaefer & Lazarus, 1981; Pearlin & Schooler, 1978), historical stressors such as war (Hill, 1948) and environmental stressors including work related stress (Chiriboga, Jenkins & Bailey, 1983).

Several life event scales have been established to measure types and amounts of stress experienced by individuals and families. Holmes and Rahe (1967) have contributed significantly to the understanding of how life events and resulting stress affects the health of individuals. Their thesis is that all changes in life, whether viewed by individuals as being positive or negative, cause stress and therefore, require some form of behavioral change. These researchers developed a self administered questionnaire (Social Readjustment Rating Scale) measuring numbers of life event changes experienced by individuals over the past six to twenty-four months. This questionnaire was used in a study of 3000 navy personnel in order to determine the relationship between numbers of life events experienced by individuals and measures of illness. This study showed that significant numbers of life changes had been experienced by individuals six months prior to the onset of illness.

Based upon research using the Social Readjustment Rating Scale, normative stress scores have been developed allowing researchers to compare their findings to a standard set of measures. Stress measures may be calculated by simply adding numbers of stress events or by adding Life Change Unit scores. The latter scores indicate that different events produce different degrees of stress. It has been argued that by using these weighted stress scores, differences in amounts of stress experienced by individuals at different life stages can be assessed in a more accurate manner (Dohrenwend, Krasnoff, Askensay & Dohrenwend, 1978). For example, hospitalization of children for assessment of behavior problems

would likely create different degrees of family stress than would sudden family deaths. The Social Adjustment Rating Scale has provided the basis for development of additional instruments which identify and classify typical life events occurring during the various developmental stages of children (Coddington, 1972) and families (Olson et al, 1983).

Criticisms of Life Event Measurement Scales

Standardized life event measurement scales have been criticized by some theorists and researchers (Dohrenwend, Krasnoff, Askensay & Dohrenwend, 1978). The ability of these scales to account for differences in amounts of stress experienced by individuals while dealing with similar life event changes has been questioned. Standardized measures of stress assume that all life event changes are equally stressful for all individuals.

Whether illness is caused by life event changes or whether life event changes are the result of illness (Monat & Lazarus, 1977) has not been determined. However, Kanner, Coyne, Schaefer & Lazarus (1981) maintain that measures of more minor life events such as daily hassles are predictive of the development of psychological symptoms more dependably than measures of major life event changes. In order to assess and fully understand types and degrees of stress experienced by families, it seems reasonable to assume that both major and minor life events must be considered.

Family Coping

There is little research reported in literature describing how families cope with stress. Of the available family focused studies, some deal with individual family members responses to family related events including marital, parental and work roles roles (Pearlin & Schooler, 1978). One relatively large study was reported by Olson et al (1983) describing how family coping strategies change according to family developmental life stages.

Definition of Family Coping

Family coping behaviors are viewed as both resources and stressors which may serve either to increase or decrease family stress (Hill, 1949; Burr, 1973; Olson et al, 1983). Coping is a "behavior that protects people from being psychologically harmed by problematic social experience, a behavior that importantly mediates the impact that societies have on their members" (Pearlin & Schooler, 1978). Within a family focus, coping can be described as those behaviors serving to retain family integration, self-esteem and independence as well as to foster individual growth within the family unit (McCubbin & Patterson, 1981).

Research Related to Family Coping

The major purpose of most family coping studies has been to identify types of coping used by families and to determine if use of coping strategies varies from one family situation to another. Pearlin & Schooler (1978) carried out a large study including 2300

individuals between the ages of 18 and 65 in an effort to determine how individuals cope with minor life events such as those related to work and home environments. Coping behaviors were shown to be gender related and situational variance in coping behaviors was common. This study indicates that women tend to cope with stress less effectively than men and that men utilize problem solving strategies more effectively than women. Individual coping efforts appear to be less effective in work situations where individuals have less control than is normally experienced within family units. These findings suggest that effective coping requires a variety of behaviors which was confirmed by Patterson & McCubbin (1984) in their study of military wives separated from their husbands. These researchers demonstrated that amounts of distress experienced by families was reported to be considerably less when wives used wide ranges of coping behaviors in order to meet their families' needs. Wives who were best adapted were also able to temporarily assume many of the roles which had been previously fulfilled by their husbands.

Folkman & Lazarus (1980) suggest that measures of coping obtained by Pearlin & Schooler (1978) were actually measures of individual's reports of how they usually coped with general sources of stress. Such reports may not be indicative of how individuals actually cope with specific stressful occurrences. Consequently, Folkman & Lazarus carried out a study in which 100 respondents were asked to identify specific stressful events occurring within the past month. These individuals were also asked to indicate how they

had coped with these situations. This study revealed that both problem and emotion focused coping were used in all stressful situations but the balance between types of coping strategies used varied across situations. For example, emotion-focused coping was used more than problem-solving coping strategies in matters related to illness. Within work situations, men tended to use more problem focused coping than women. No gender differences in the use of emotion-focused coping was found.

In a study of over 1200 American families, Olson et al (1983), set out to identify if family coping and family stress changed across various stages of family development. These researchers reported that commonly used family coping strategies were: seeking spiritual support, reframing or redefining situations, and using informal and formal resources. Passive appraisal (accepting things as they were) was not reported as being a helpful coping strategy. Utilization of internal and external family coping strategies was shown to be related to family life cycle stages. For example, younger families tended to use spiritual support strategies and mobilize their families to acquire help less often than older families. These researchers also reported that husbands and wives do not always agree in their evaluations of how their families cope with stress.

Conclusion

There are few studies reported in literature describing how families cope with stress resulting from normative and non-normative

life event demands. In addition, there is little information available describing how families cope with long term stress such as caring for children with chronic behavior problems (Venters, 1981). Systems developmental theory has been used to describe differences in types and amounts of stress experienced by families as well as identify differences in coping strategies used by families. Systems research methodology using life event measures of family stress and coping is not flawless and has not been extensively used to study families of children with behavior problems. However, this theoretical framework does appear to have potential for use in research aimed at describing differences which may exist in types and amounts of stress experienced and coping strategies used by families of children with behavior problems.

CHAPTER III

Methodology

Chapter III provides a description of the setting in which this correlational descriptive study was carried out, subjects included in the study and the research methodology used. In addition, the instruments used for data collection are discussed.

Setting

This study was conducted on two pediatric-psychiatric assessment units, one in each of two large urban teaching hospitals. These units follow similar admission, assessment and discharge routines. Both units base their programs on behavior modification techniques and provide teaching sessions for parents whose children are admitted to these units.

Children between five and sixteen years of age are referred to these units (total of 22 beds) for complete behavioral, psychological and physical assessments; diagnosis; and initial treatment of various social and psychological disturbances including behavior disorders of childhood. Referrals to these units are usually initiated by school teachers, social workers, mental health workers, general practitioners and pediatricians located in the northern half of the province where this study was carried out. Average length of hospitalization is eighteen to twenty-one days. Most children are returned home following discharge. When children

are severely disturbed or when families can not care for their children at home, these children are transferred to long term care facilities.

Sample Size

A sample of forty families who had children admitted to one of two pediatric/psychiatric units for assessment of behavior problems was chosen for this study. Determination of the sample size was based upon statistical concepts of power, effect size and significance criteria (Cohen, 1977). Cohen maintains that in behavioral science research, a power of .80 should be maintained in order to ensure a reasonable probability that a false null hypothesis will not be accepted as true. A large effect size of .50 was chosen for this study for two reasons. Firstly, in order to investigate a small (.10) or medium (.30) effect size and maintain a power value of .80, sample sizes of 783 or 84 would be required (Cohen, 1977, p.102). Obtaining a sample of this magnitude was not feasible due to time restraints and subject availability. Therefore, a sample of 40 was chosen providing a power of .90 while measuring a large effect size (.50). A large effect size suggests that twenty-five percent of the variance of one variable is "associated linearly with the variance in the other" (Cohen, 1977, p.80). For example, if a large effect size is demonstrated between the variables of family stress and family coping, twenty-five percent of the variance in measures

of family stress will be explained by differences in family coping behaviors. There appears to be sufficient evidence in literature to suggest that a significant correlation between family coping, family stress and behavior problems in children may exist. According to Cohen (1977), studying a large effect size is appropriate when researchers anticipate high correlations between variables based upon reviews of available literature.

The decision to utilize a sample size of forty families was also influenced by the fact that family coping population means (McCubbin, personal communication, 1985) and ranges of family stress (McCubbin & Patterson, 1983) were derived from large samples using parametric statistics. In order for the researcher to compare family coping and stress scores provided by families of children with behavior problems to the larger population, it was necessary for the researcher to use similar parametric statistics. A sample size of forty is appropriate for purposes of this comparison because differences in findings due to use of parametric versus non-parametric statistics becomes negligible once sample sizes exceed thirty (Williamson, 1981).

Ethical Considerations

Before data collection commenced, the researcher's thesis proposal was reviewed and accepted by the ethical review committee within the Faculty of Nursing. In addition, ethical

clearance and permission to conduct this study were received from both hospitals where data collection was carried out.

Families were asked to provide signed written consent and were informed that they were free to withdraw from the study at any time. Families who participated in the study were not exposed to any risk since no treatment was changed or withheld. Confidentiality was maintained by utilizing a coding system to ensure that families were not identified on any of the data collection instruments.

Selection of Subjects

Data collection was carried out between July, 1985 and May, 1986. A convenience sample of forty families was obtained from fifty-six families identified by unit personnel as meeting study criteria established by the researcher. Families with children on pediatric psychiatric assessment units were selected for inclusion in this study based on the following criteria:

1. Hospitalized children were between six and eleven years of age. Children under six years of age are not usually identified as having behavior problems and therefore are not usually admitted to assessment units unless problematic behaviors are severe. The upper age limit was chosen because children over eleven years of age are entering adolescence and many extraneous variables related to this stage of development could be introduced.

2. Hospitalized children did not have severe physical or emotional problems in addition to their behavior problems. The addition of severe handicapping conditions would introduce additional family stressors, thereby minimizing control of this variable.

3. These were children's first admissions to pediatric assessment units. Repeat admissions suggest chronicity of behavior problems and either the inability of children to respond to treatment or the inability of families to follow therapeutic regimes.

4. All parents were able to read and write English. This specification was necessary since all questionnaires were written in English.

Information obtained from one of the hospital units where data collection was carried out indicated that a significantly large number of children admitted for assessment of behavior problems came from single parent families. In order to increase availability of eligible families, the researcher decided to include both single and two-parent families as long as other inclusion criteria were met.

Of the fifty-six families identified as meeting the criteria for inclusion in this study, sixteen did not participate for the following reasons: Though agreeing to participate in the study, six families refused to complete questionnaires on the hospital units and another two families did not show up for agreed upon meetings. One family refused to

participate believing that the questions were too personal. Two other families simply were not interested in participating. Finally, four families did not return the questionnaires and one family returned incompleted questionnaires.

Procedures

Eligible families were identified by unit personnel and were provided with an introductory letter written by the researcher (see Appendix A). These families' names and telephone numbers were provided to the researcher by unit nurses. During a telephone call to these families, the researcher described the purpose of the study, answered questions related to the study, provided an explanation regarding the completion of study questionnaires and asked for verbal consent for their participation. In addition, a time was scheduled when the researcher could meet with families on the hospital units.

Initially, the researcher attempted to meet with parents when they came to the units for family visiting night, or when children either left or returned from weekend passes. This plan was an attempt by the researcher to minimize the amount of inconvenience experienced by participating families. During this meeting, further explanations regarding the study were provided, informed consent forms were signed (see Appendix B) and questionnaires were filled out by parents. Whenever possible, both parents were asked to provide written consent

and to fill out a set of study questionnaires. Families were also given the opportunity to leave their addresses so that a copy of the research summary could be forwarded to them upon completion of the study. As data collection commenced, it became apparent that some families were experiencing difficulties in completing study questionnaires since parents preferred to spend as much time as possible with their children during visiting hours. Also, the researcher was concerned that accuracy of data provided when parents were feeling very rushed due to other commitments, may be less than optimal. Consequently, the researcher made the decision to allow families to take questionnaires home if they wished, with the qualification that they fill the questionnaires out independently and without consultation with other family members or friends. All families who were given the option of taking the questionnaires home chose to do so.

Instruments

Demographic Information

Demographic information was collected on an information sheet developed by the researcher (see Appendix C). These data included total numbers of children in the family, ages of all family members, duration of children's behavior problems, methods of referral to assessment units and educational status and occupation of parents. This information was used to develop a profile of families who participated in the study.

Child Behavior Checklist (CBCL)

The Child Behavior Checklist (see Appendix D) was created by Achenbach & Eldelbrock (1977, 1978, 1979). This instrument serves to measure parental perceptions of numbers and types of positive and negative behaviors children have demonstrated during the past six month period. According to Achenbach (1981), parents are the most reliable sources of information regarding their children's behaviors.

The CBCL consists of twenty Social Competency items evaluating children's participation and proficiency in the areas of sport and non-sport activities, organized and non-organized social activities and school performance. Parents are asked to list activities in which their children participate and then rate their children in terms of the amounts of time spent on each activity and their performances in each area.

The 118 Behavior Problem items were derived from a literature search and an evaluation of children who were receiving psychiatric care. To control for behavior changes occurring during the normal growth and development stages of childhood, Achenbach established age related (4-5, 6-11, 12-16 years) behavioral norms for both boys and girls. Parents are asked to respond to these items by indicating whether behaviors are not true of their children (0), sometimes true (1) or very often true (2). A total summative score for Behavior Competence and Behavior Problems is determined.

Test-retest reliability for Social Competencies is reported to be .996, and .952 for the Behavior Problem measure. When parents fill out this instrument separately, inter-parent reliability is reported to be .978 for the Social Competencies and .985 for Behavior Problems (Achenbach & Edelbrock, 1981).

Family Inventory of Life Event Changes (FILE)

FILE is used to evaluate numbers of normative and non-normative life events experienced by families during the past year (McCubbin, Patterson & Wilson, 1981). Family stress sub-scales include intra-family strains, marital strains, pregnancy and childbearing strains, and also stress due to finance and business, work and family transitions, illness, losses, transitions "in and out" of families, and family legal violations.

FILE is a seventy-one item self report scale requiring a "yes' or "no" answer to be checked off in response to a series of statements describing different strategies used by families to cope with difficulties they experience (see Appendix E). Internal reliability was established in a study which included 322 families who cared for chronically ill children and is reported to be .72 (Cronbach's alpha) (McCubbin & Patterson, 1981). Predictive validity was established in a study of families of children with cystic fibrosis. It was demonstrated that an increase in the numbers of reported family life events

was predictive of changes in children's pulmonary function results (McCubbin & Patterson, 1983).

FILE is scored by one of two methods. The first method provides summative scores indicating total numbers of changes families have experienced over the past year. This information identifies sources of family stress as well as providing a numerical count of family stressors. Weighted stress scores give a more qualitative measure of degrees of stress experienced by families. These scores are based upon data gathered from normal families who rated degrees of adjustment required by several normal life event changes, such family moves or family deaths (McCubbin & Patterson, 1983). These researchers also developed weighted stress score norms corresponding to various family developmental stages. In addition, ranges of scores indicating High, Moderate and Low Family Stress are provided.

Family Crisis Oriented Personal Scales (F-COPES)

F-COPES (see Appendix F) evaluate family coping behaviors (McCubbin, Patterson & Larsen, 1981). This instrument measures family coping behaviors by identifying what families do to reduce the effects of stressors arising from within family units and between families and their communities. This measure includes problem solving behaviors as well as behaviors serving to reduce the emotional impact of stressors. The FILE instrument provides general measures of family coping rather

than measures of how families respond to specific events. Coping strategies are categorized as: mobilization of families to acquire and accept formal social support such as is offered by medicine and nursing; passive appraisal or accepting things as they are; acquiring informal social support from other family members, friends and neighbors; reframing or redefining family situations in a more positive manner; and, seeking spiritual support.

This thirty item questionnaire is scored on a five-point Likert scale where "1" indicates that families are unlikely to utilize this coping behavior and "5" indicates that this behavior is frequently used. A total coping score is obtained by summing scores for each of the thirty items. Sub-scale scores are obtained in the same fashion. It is important to note that these scales are not measures of the effectiveness of coping behaviors; rather, it is simply a measure of numbers and types of coping behaviors families use.

The initial F-COPES questionnaire contained forty-nine coping strategies identified from literature. This original instrument was tested on a sample of 119 university students. Following statisical analysis of results, the number of items was reduced to thirty. Test-retest reliability (.81) on the shorter version was obtained by carrying out a study including 116 subjects (McCubbin, personal communication, 1985). Overall internal reliability is reported as being .77 (Cronbach's alpha) (McCubbin & Patterson, 1981). Construct validity has

also been established (Olson et al,1983; McCubbin & Patterson, 1981). Population norms for both males and females are available for F-COPES sub-scales and for total F-COPES scores.

Since the CBCL, FILE and F-COPES instruments are protected under copyright, the researcher obtained written permission from the authors to use these instruments in this research project (see Appendix G and Appendix H).

Unit of Analysis

Ideally, the unit of analysis for family related research should be total family units. Many of the methodological issues involved in obtaining family data have not been resolved by theorists and researchers. Theoretical reasoning based upon the systems model of family adaptation would suggest that in order for researchers to obtain valid family unit data, each family member must provide input for use in calculations of family scores (Filsinger & Lewis, 1981). However, calculation of these family scores has become another issue of considerable concern to researchers. It could be argued that within a systems perspective, measurement of family variables such as family stress and coping involves more than summing individual family member scores. If "average" family scores are calculated, individual contributions of each family member are not taken into account.

Patterson & McCubbin (1983) discuss the merits and problems of having both parents fill out FILE questionnaires on

either an individual or cooperative basis in order to obtain family data. These researchers state that when parents fill out these instruments together, family stress scores are obtained but this cooperative effort may underestimate the amounts of stress actually experienced by individual family members. Due to the flexibility of parental role structure in North American families, it could be expected that parental perceptions of family stress may differ. Use of individual parental scores allows researchers to determine parental perceptions regarding amounts of stress families have experienced. The difference between scores provided by parents are referred to as couple-discrepancy scores. Family-couple stress scores may be calculated by adding total numbers of responses recorded by both parents.

Data Analysis

CBCL, FILE and F-COPES questionnaires were hand scored by the reseacher following scoring protocols established for these instruments. Demographic, family coping, family stress data, and children's behavior scores were coded on optical scanner coding sheets. Statistical analysis was done utilizing the Social Sciences Statistical Package-X (SPSSX, 1983) and the Epistat Statistical Package for use on IBM personal computers (Gustafson, 1984).

Demographic Data

Demographic data are analysed in order to produce sample means and ranges for describing selected sample characteristics and for providing a descriptive profile of families. Structural family characteristics such as family type (single or two-parent families), family developmental stage and numbers of children per family are described. Children admitted to assessment units are characterized using information data related to their sex, age, ordinal position in their families and reported duration of behavior problems. Methods of referral are also described.

Analysis of Major Variables

Relationships between family life event demands (family stress), family coping and behavior problems in children were examined using a Pearson Product Moment Correlation statistic. Further analysis of these relationships was carried out using measures of central tendency and variability in order to describe similarities and differences between measures of the three focal variables. Sample mean and range scores are compared with established normative scores provided for use with the CBCL, FILE and F-COPES instruments.

A non-parametric Mann-Whitney U statistical test was used to determine if there were statistically significant differences in the following groupings of mean scores: mothers' and fathers' scores from two-parent families, mothers' scores

from single and two-parent families, [redacted]hers' scores from the two hospital units where data col[redacted]on was carried out. It was necessary to use a non-parametric comparative measure because of the small numbers of subjects included in each sub-grouping of the total sample.

CHAPTER IV

Results

The purpose of this chapter is to present the results of this study and will be organized in the following manner. First, a demographic profile of the families is presented. Second, analysis directly related to the research question examining relationships between family life event demands, family coping and behavior problems in children is considered. Finally, a description of types of behaviors exhibited by children, sources of family stress, and types of coping strategies used by families is described.

Sample Characteristics

All forty families included in this study had children admitted to one of two pediatric psychiatric units for assessment of behavior problems. A summary of these families' demographic and structural characteristics is provided. A profile of the children is also included.

Demographic Characteristics of Families

Selected family demographic characteristics are summarized in Table 3 (see Table 3). The mean age for mothers was thirty-four years (range 25-49 years), and thirty-nine years for fathers (range 28-46 years). The maximum educational level reported by twenty-four of the thirty-eight mothers and ten of the thirteen fathers was high school completion. The remaining fourteen mothers and three fathers received post secondary education ranging from short practical certificate courses to completion of university master's degrees.

Table 3.

Demographic Characteristics of Families

Characteristic	Numbers of Parents	Percentage of Sample
Education of Parents		
Mothers (n=38)		
High School or Less	24	63.2
Post Secondary	14	36.8
Fathers (n=13)		
High School or Less	10	76.9
Post Secondary	3	23.1
Employment of Parents		
Mothers		
Employed	24	63.2
Unemployed	7	18.4
Homemakers	7	18.4
Fathers		
Employed	11	84.6
Unemployed	2	15.4
Family Income		
Less than $10,000	7	17.5
$11,000- $20,000	13	32.5
$21,000- $30,000	11	27.5
$31,000 and Over	9	22.5

Fourteen of the thirty-eight mothers were full-time homemakers; however seven of these mothers reported that they were full-time homemakers only because they were unemployed. Twenty-four mothers were employed outside of the home on either a full-time or part-time basis. Of the thirteen fathers, two were unemployed. The unemployment rate of parents wanting to work was 20.5 percent which is higher than the provincial unemployment rate of twelve percent (STATS Canada, August, 1986). Annual family incomes ranged from less than $10,000 to over $50,000 but 77.5 percent of these families reported average incomes of less than $30,000. The mean provincial annual family income for 1981 was $30,390 (STATS Canada, 1981).

Structural Characteristics of Families

Of the forty families included in this study, forty percent were single parent families. This rate exceeds the 1981 provincial rate of 11.2 percent (STATS Canada, 1981) (see Table 4). Two-parent families included families having one male and one female adult living within the same home fulfilling the specific roles of father and mother. Both legal and common-law marriages were included in this category. Single parent families were those families in which only one adult resided within the home and fulfilled the parenting role(s).

Eighty percent of families included in the study were within the school age family developmental stage (Duvall, 1957) (see Table 4. Their eldest children were thirteen years of age or younger. Six families were in the adolescent stage of development

Table 4.

Structural Characteristics of Families

Characteristic	Number of Families (n=40)	Percentage of Sample
Family Types		
Two-Parent	24	60.0
Single Parent	16	40.0
Family Developmental Stage		
School age	32	80.0
Adolescent	6	15.0
Launching	2	5.0

where the eldest children were between fourteen and eighteen years of age. Two families were in the launching stage indicating that their eldest children were eighteen years or older and were either presently living independently from their parents or would be in the near future. The mean number of children per family was 2.3, with a range of one to five children per family. The mean number of children per family in this province is 1.4 (STATS Canada, 1981). Compared to the larger provincial population, this study sample overly represents single parent and unemployed families. Annual average family incomes are nearly identical in both populations.

Characteristics of Children with Behavior Problems

The characteristics of the forty children admitted to hospital for assessment of behavior problems are summarized in Table 5 (see Table 5). Of these children, thirty were boys and ten were girls, a ratio of 3:1. The reported sexual distribution of behavior problems in children varies from three boys to one girl (Stott, 1978) to two boys to one girl (McGee, Silva & Williams, 1984).

Children ranged in age from six to eleven years with a mean age of 9.4 years. The mean age for girls was 9.6 years (range 9-11 years) and for boys was 9.3 years (range 6-11 years). Thirteen children were the eldest children in their families, five were 'middle' children, thirteen were the youngest siblings and nine were only children. Parents reported that their children had exhibited behavior problems during a time period ranging from one month to over two years. Sixty-five percent of these children had exhibited behavior problems for more than two years.

Only three families reported that their decision to seek professional help for their children and themselves had primarily been a family decision. Sixty-five percent of families had been referred to assessment units by external sources such as teachers, social workers, family physicians and friends. Eleven families indicated that although external sources had influenced their decisions to seek and accept professional help, their families had been involved in this decision to some extent.

Table 5.

Characteristics of Children with Behavior Problems

Characteristics	Number of Children	Percentage of Sample
Sex		
Females	10	25.0
Males	30	75.0
Ordinal Position		
Eldest	13	32.5
Middle	5	12.5
Youngest	13	32.5
Only Child	9	22.5
Duration of Behavior Problem		
1-3 months	1	2.5
4-6 months	4	10.0
7-12 months	5	12.5
13-24 months	4	10.0
over 24 months	26	65.0
Referral Method		
Family Decision	3	7.5
External	26	65.0
Both Methods	11	27.5

Mothers' Scores Representing Family Scores

In only eleven of the twenty-four two-parent families included in this study were both parents able to complete study questionnaires. The inability of one parental family member to participate was attributed to a variety of reasons including parental illness, lack of interest, lack of time or availability due to job related commitments. Data were obtained from mothers in all but two cases. In one instance, the father was a single parent and in the other, the father was the sole respondent for a two-parent family. These two families were excluded from further analysis due to the concern that uncontrolled gender-related variables may have been introduced. Since there were only two such families, statistical comparisons determining whether responses of these two families were significantly different than the rest of the sample were not feasible. Therefore, the sample was composed of twenty-three two-parent families and fifteen single parent families.

Ideally, data should be obtained from each family member in order to accurately calculate family unit scores (Filsinger & Lewis, 1981). However, this was an impossible goal to achieve given the lack of father participation and the ages of children belonging to these families. In most instances, family data were obtained only from mothers. Even though use of mothers' scores may tend to represent individual perceptions of family functioning, a decision was made to use mothers' data based on McCubbin's (1985, September) suggestion that individual family members may provide acceptable

measures of family function. In addition, a signed rank test (see Table 6) was carried out to determine if mothers' scores could represent families' scores for the purposes of this study. Statistical comparisons of scores provided by mothers and fathers from two-parent families did not demonstrate significant differences in family stress, coping and children's behaviors. The calculated z scores were not within the critical range of plus or minus 1.96 (.05).

Table 6.

Comparison of Mothers' and Fathers' Scores in Two-Parent Families (n = 11)

Variable Measures	Z-Score
F-COPES	.30*
FILE	
Number of Changes	.30
Weighted Stress Scores	.29
CBCL Scores	-1.50

*p> .05

In order to determine if family types (single and two-parent), or admissions to different hospital units were associated with differences in mothers' scores, further statistical analysis were carried out. A Mann-Whitney U statistic was the test of choice because of the small numbers included in the sub-sample groups utilized for this analysis. Comparison of twenty-three married and fifteen single mothers' stress, coping and children's behavior scores did not show significant differences in mean, median or rank scores ($p > .05$) (see Table 7). A similar comparison of scores provided by the twenty-seven mothers representing one hospital unit and the eleven representing the second unit did not show statistically significant differences (see Table 8). Based on these findings, the researcher combined the scores of all thirty-eight mothers into a larger singular group for purposes of further data analysis. Mothers' scores were accepted as being the best available source of family data considering time and subject availability limitations experienced by the researcher.

Table 7.

Comparison of Married and Single Mothers' Scores

Variable	Mean	Median	Positive Ranks	Negative Ranks
F-COPES				
Married (n=23)	93.7	92	459.5*	281.5
Single (n=15)	92.1	92		
FILE				
Number of Changes				
Married	12.9	14	441.5	299.5
Single	13.7	12		
Weighted Scores				
Married	558.4	591	452.0	289.0
Single	569.4	510		
CBCL Scores				
Married	74.7	75	490.0	251.0
Single	70.3	65		

* p> .05

Table 8.

Comparison of Mothers' Scores: Two Hospital Units

Variable	Mean	Median	Positive Ranks	Negative Ranks
F-COPES				
Hospital 1 (n=27)	94.6	93	564*	177
Hospital 2 (n=11)	89.5	90		
FILE				
Number of Changes				
Hospital 1	12.3	12	487	254
Hospital 2	15.5	15		
Weighted Scores				
Hospital 1	524.2	474	482	259
Hospital 2	658.0	657		
CBCL Scores				
Hospital 1	69.8	68	490	251
Hospital 2	80.7	90		

* $p > .05$

Relationships Between Family Life Event Demands, Family Coping and Behavior Problems in Children

The Pearson Product Moment Correlation statistic was used to examine directions and degrees of relationships between composite measures of family life event demands, family coping and children's behavior problems (Pagano, 1981, p.120). Two measures of family life event demands or family stress were used, summative scores representing total numbers of changes experienced by families during the past year and corresponding weighted stress scores provided for use with the FILE instrument (McCubbin, Patterson & Wilson, 1981). Family coping scores are measures of types and numbers of internal and external coping strategies used by families (F-COPES, McCubbin, Olson & Larsen, 1981). Behavior scores represent both fotal internalizing and externalizing behavior problem scores as well as total social competency scores (CBCL, Achenbach & Edelbrock, 1983).

Correlational Analysis

Correlations between composite measures of family stress, family coping and children's behavior problems were not found to be significant in this sample (see Table 9). Directional information obtained from this analysis did provide some insight into the above relationships and served as a basis for further analysis. For purposes of illustration, only one interpretation of directional information will be provided although it should be remembered that reversed interpretive statements must also be considered.

Table 9.

Correlations Between FILE, F-Copes and CBCL Scores (n=38)

	FILE		F-COPES	CBCL	
	Number	Weighted		Behavior Problems	Social Competency
FILE					
Number	-	.98	-.24	.18	-.09
Weighted	-	-	-.28	.17	-.12
F-COPES	-	-	-	.05	.33*
CBCL					
Behavior Problems	-	-	-	-	-.36*
Social Competency	-	-	-	-	-

* $p < .05$

The direction of relationships between both measures of family stress and family coping were negative, suggesting that as family stress increases, family coping decreases. Positive relationships between children's behavior problems and family coping as well as between children's behavior problems and family stress were demonstrated. This directional information suggests that family

coping Strategies increase as behavior problems increase. Similarly, family stress increases as children's behavior problems increase.

Family coping and social competency behaviors of children were positively and significantly related ($r=.33$; $p<.05$). In addition, total behavior problem scores and social competency scores were negatively and significantly related ($r=-.36$, $p<.05$). Based upon these findings, it could be expected that families who cope well are more likely to have children who demonstrate positive behaviors. Furthermore, children exhibiting significant numbers of behavior problems generally do not demonstrate many social competency behaviors.

Although statistically significant correlational relationships between all of the selected variables were not demonstrated, it cannot be assumed that relationships between these variables do not exist (Pagano, 1981), nor can it be assumed that non-significant statistical calculations mean that variable relationships are not of clinical importance. Therefore, central tendency, frequency measures and additional correlational analysis were carried out for the purposes of further describing the relationships between the main study variables.

Descriptive Analysis

Comparison of paired variables such as family stress and family coping provided descriptive information which could be used to answer the following queries: Do families who experience different levels of stress utilize the same family coping strategies? Do

behavior problems of children change with increases in family stress? Do coping strategies used by families vary with types of behavior problems demonstrated by children?

Family Stress and Family Coping

Family stress and family coping were positively related, though not significantly (see Table 9). Central tendency and frequency measures were used to further explore the relationship between these two variables.

McCubbin & Patterson (1983) proposed weighted family developmental stage stress score norms for use with the FILE instrument. These norms are ranges of scores used to categorize families into high, moderate and low stress groups (see Table 10). Since these norms were based upon two-parent families, only data obtained from the twenty-three two-parent families were included in this analysis.

Fifty-seven percent of these twenty-three two- parent families reported that they were experiencing moderate levels of family stress (see Table 10). Of these families, the largest group were within the school age family developmental stage. These families demonstrated significantly higher stress scores than normal two-parent, school-aged families (see Table 10). Families within the adolescent and launching stages also reported higher mean stress scores than did corresponding normative samples.

Mean scores representing types of coping strategies used by families were calculated for each group of families within the high,

Table 10.

Stress Level Frequencies of Two-Parent Families Across Developmental Stages (n=23)

Developmental Stage	Stress Levels			Mean
Stage	Low	Moderate	High	Scores
School Age	3	10	5	621.9
Adolescent	0	2	1	625.3
Launching	0	1	1	942.5
	Normative Scores*			
School Age	0-265	266-734	735+	500.0
Adolescent	0-240	241-849	850+	545.0
Launching	0-320	321-949	950+	635.0

* McCubbin, H.I., & Patterson, J.M. (1983). Stress: The family inventory of life events and changes. In E. Filsinger (Ed.), Marriage and family assessment: A source book for family therapy. Beverly Hills: Sage publications.

moderate and low stress categories (see Table 11). Types of coping strategies used by families remained constant across stress categories. Reframing and obtaining social support were reported as the most frequently used family coping techniques. Therefore, these families of children with behavior problems use both internal and

external family coping resources. However, use of all types of family coping strategies tended to decrease as levels of family stress increase.

Table 11.

Mean Coping Scores of Families Experiencing Different Levels of Stress (n=38)

Coping Strategies	Levels of Stress		
	High	Moderate	Low
Social Support	25.4	30.1	28.5
Reframing	28.1	31.5	36.0
Spiritual Support	10.9	11.3	16.0
Passivity	7.9	7.1	12.5
Mobilizing Family	13.4	16.0	18.0

Family Coping and Behavior Problems

Initial correlation analysis demonstrated a positive trend in the relationship between measures of family coping and behavior problems in children (see Table 9). A second Pearson Product Moment correlation statistic was used to investigate this same relationship using sub-categories of each variable. For the purposes of this analysis, family coping scores were subdivided into internal and external coping strategies following F-COPES criteria (McCubbin,

personal communication, 1985). Internal coping strategies include behaviors or resources which are available within the family unit to reduce the effects of stress. These behaviors reflect the degree of confidence families have in their problem solving abilities and their abilities to reframe or redefine family life situations in more positive ways. External family coping strategies include utilization of external resources such as support provided by friends, church, neighbors, community and professionals. Children's behaviors are categorized as internalizing behaviors (covert), externalizing behaviors (overt), and social competency behaviors.

A positive correlation between internal and external family coping scores ($r=.33$; $p<.04$) confirms that families including families with school aged children tend to use a variety of coping strategies in order to maintain family stability. The correlation between externalizing and internalizing behavior problems of children was positive and statistically significant ($r=.45$; $p<.005$), suggesting that children with behavior problems tend to demonstrate a variety of behaviors.

Internal family coping scores were significantly related to internalizing behaviors of children (see Table 12). In other words, families whose children demonstrate less visible behavior problems attempt to deal with these behaviors by using resources available within their family units rather than attempting to seek professional help. Correlations between family coping strategies and externalizing behaviors were not found to be statistically significant; however, directional information suggests that there is

a tendency for children's externalizing behaviors to decrease as use of both internal and external family coping strategies increase.

Although strong statistical support was not obtained to support these relationships, there is some statistical evidence to suggest that use of family coping strategies varies according to types of behaviors demonstrated by children.

Table 12.

Correlations Between Internal and External Family Coping and Internalizing and Externalizing Children's Behaviors (n=38)

Coping	Behavior Problems	
	Internalizing	Externalizing
Internal	.42*	.21
External	-.06	-.13

* $p < .008$

Family Stress and Behavior Problems

Correlational analysis between total FILE scores and total behavior problem scores resulted in the identification of positive but non-significant variable relationships (see Table 9). Central tendency (mean scores) were used in order to examine the relationships between two measures of family stress (weighted family stress scores and numbers of family changes) and two types of children's behavior problems (internalizing and externalizing).

Weighted Family Stress Scores

Mean family weighted stress scores were categorized according to ranges of scores serving to identify and classify families into low, moderate and high levels of family stress. Behavior problem scores were sub-divided into internalizing and externalizing behaviors. Examples of internalizing behaviors include withdrawing behaviors such as anxiety and depression, whereas externalizing behaviors include acting-out behaviors such as hyperactivity and aggression.

Families within the low stress category reported more children's total behavior problems (mean 75.0) than did high stress families (mean 65.8) (see Table 13). Low stress families reported the highest number of children's internalizing behaviors (mean 38.5) but the lowest number of externalizing behaviors (mean 36.5). The highest total behavior problems (mean 76.3) and highest number of externalizing behavior problems scores (mean 42.6) were reported by the group of families experiencing moderate levels of stress.

Numbers of Family Changes and Behavior Problems

The relationship between numbers of changes experienced by families over the past year and externalizing behaviors of children suggests a trend that when families experience increased numbers of family changes, children exhibit more externalizing behaviors and possibly [illegible] internalizing behaviors (see Table 14).

Table 13.

Comparison of Mean Behavior Scores Across Levels of Family Stress

(n=38)

Types of Behaviors	Stress Levels		
	High	Moderate	Low
Internalizing	24.9	33.7	38.5
Externalizing	40.9	42.6	36.5
Total Behavior Problems	65.8	76.3	75.0

Table 14.

Correlation Between Numbers of Family Changes and Behavior Problems

(n=38)

	Behaviors		
	Internalizing	Externalizing	Total
Numbers of Changes	-.05	.30*	.18

*p >.05

Sources of Family Stress and Children's Behavior Problems

The major sources of family stress were identified as being intra-family and work-family strains (see Table 15). Relationships between sources of family stress and children's internalizing or externalizing behaviors were examined. Intra-family strains and externalizing behaviors demonstrated by children were positively related ($r=.41$; $p<.01$). The relationship between internalizing behaviors and intra-family stress was not significant; however, the positive direction of this relationship does indicate a trend for intra-family strains to increase as internalizing behavior problems of children increase. The second highest source of family stress, work-family strains, was not significantly related to either externalizing or internalizing behavior problems, but the directions of these relationships were shown to be opposite. The relationship between externalizing behaviors and work-family strains was positive, while the relationship between internalizing behaviors and work-family strains was negative. In other words, externalizing behaviors tend to increase and internalizing behaviors tend to decrease as work-family strains increase. In some cases, the types of behaviors demonstrated by children correspond to types of stress experienced by families.

Table 15.

Correlations Between Sources of Stress and Behavior Problems (n=38)

Sources of Stress	Behaviors	
	Internalizing	Externalizing
Intra-family	.08	.41*
Work-family	-.13	.11

* $p < .01$

Behavior Problems of Children, Family Stress and Family Coping: Similarities and Differences

A wide range of scores representing children's behaviors, family stress and family coping were reported by families included in this study. The following section describes similarities and differences regarding these family characteristics and more specifically addresses those similarities and differences demonstrated by single and two parent families. In addition, scores obtained from families of children with behavior problems and normative scores developed for use with the instruments utilized for purposes of data collection are compared.

Behavior Problems of Children

Mothers of children being assessed for problematic behaviors provided data describing both positive and negative childhood

behaviors. A description of types of behaviors demonstrated by these children will be followed by a comparison of behaviors demonstrated by children from single and two-parent families. Sample scores will also be compared to normative CBCL scores (Achenbach & Edelbrock, 1983).

Children with behavior problems are reported to exhibit a variety of behaviors including both internalizing and externalizing behaviors. The overall sample mean for total behavior problems demonstrated by girls and boys was 72.9 with scores ranging from 32-117. Externalizing behaviors such as aggression and hyperactivity accounted for 58.8 percent of the total number of behavior problems reported.

Social competency scores also demonstrated a significant degree of variability with a range of 5-21 (mean 15.0). Social competency measures describing children's successful involvement in social interactions were reported by families to be highest in sporting and individual activities and lowest in the school setting.

Single and Two-Parent Families

Fewer negative behaviors were reported by single parent families (mean 70.3) than by two-parent families (mean 74.7). All sub-group measures of behavior problems were lower within the single parent family group (see Table 16). Total social competency scores were somewhat lower in single parent families than they were in two-parent families.

Table 16.

Mean Numbers of Behavior Problems in Single and Two- Parent Fami

Types of Behaviors	Families			
	Two-Parent (n=23)		Single Parent (n=15)	
	Mean	Percent	Mean	Percent
Behavior Problems				
Internalizing	31.6	42.3	27.7	39.4
Externalizing	43.1	57.7	42.6	60.6
Total Scores	74.7		70.3	
Social Competency				
Activities	7.6	50.3	7.0	49.6
Social	4.5	29.0	4.1	32.6
School	3.4	21.9	3.0	22.5
Total Scores	15.5		14.1	

Comparison of Boys' and Girls' Behaviors

In this sample, total behavior problem scores for girls (mean 79.9) were higher than for boys (mean 70.5) (see Table 17). In addition, girls scored higher than boys for both internalizing and externalizing behaviors. Nearly sixty-two percent of girls' behavior problem scores were attributed to externalizing behaviors, whereas,

only 57.2 percent of boys' negative behaviors were due to similar overt behaviors. Social competency behaviors were basically the same for boys (14.8) and girls (15.3).

Table 17.

Mean Behavior Problem and Social Competency Scores for Girls and Boys

	Boys (n=30)		Girls (n=10)	
	Mean	Percent	Mean	Percent
Behavior Problems				
Internalizing	29.9	42.2	30.6	38.3
Externalizing	40.6	57.3	49.3	61.7
Total Scores	70.5		79.9	
Social Competency				
Activities	7.4	50.0	7.6	49.7
Social	4.5	30.4	4.2	27.5
School	3.3	22.3	3.5	22.9
Total Scores	14.8		15.3	

Comparison of Study Scores to Behavior Norms

Norms for both behavior problems and social competency behaviors of children are related to normative age and sex developmental phases (see Table 18). The expected CBCL behavior score for boys between the ages of six to eleven years is 40-42 (Achenbach & Edelbrock, 1983). Twenty-eight of the thirty boys included in this study scored above the cut-off scores indicating problematic or inappropriate behaviors. Behavior problem scores provided by two families suggested that these parents perceived their boy's behaviors to be normal although these same behaviors were diagnosed as being clinically abnormal. All ten girls in this study scored above normative scores for girls from six to eleven years (37-41) indicating that their behaviors were either clinically abnormal or were perceived by their families as being abnormal.

Sixteen of the thirty boys included in this study were perceived by their families to be less socially competent than normal boys within their age group. Fourteen families believed that their son's participation and achievements in school, sports, hobbies and daily chores at home were within normal limits. Parents of seven of the ten girls believed that their girls functioned below normative standards of social competency for their age group.

Table 18.

Comparison of Children's Behavior Scores to CBCL Norms* (n=40)

Cut-off Scores for Children's Behaviors	Numbers of Children
Behavior Problems	
Girls	
Problem (higher than 37-41)	10
Normal (less than 37)	0
Boys	
Problem (higher than 40-42)	28
Normal (less than 40)	2
Social Competency	
Girls	
Problem (lower than 16.5)	7
Normal (higher than 16.5)	3
Boys	
Problem (lower than 16)	16
Normal (higher than 16)	14

* Achenbach, T.M., & Edelbrock, C. (1983). Manual for the Child Behavior Checklist and Revised Child Behavior Profile. United States: Queen City Printers.

Family Life Event Demands

Measures of family life event demands or family stress include summative totals of numbers of changes experienced by families over the past year and related weighted stress scores (McCubbin, Patterson & Wilson, 1981). A description of sources of family stress and a comparison of sources of stress experienced by single and two-parent families is included.

Numbers of Family Changes

Numbers of life event changes occurring in families over the past year ranged from one to twenty-seven. The mean number of changes was 13.2 (range 1 to 27). The greatest number of changes were related to intra-family strains such as increased parental time spent away from families, increased parental and/or parent-child conflicts, increased numbers of unresolved issues or increased numbers of incompleted jobs. These changes accounted for 40.1 percent of the mean number of family changes experienced by the total sample of families. work-family transitions and strains including relocation to new homes and/or schools and changes within work settings, accounted for an additional 21.2 percent of family changes. The third highest category of changes creating family stress was associated with financial matters (16.7 percent). For example, some families had taken out loans and/or had made major purchases such as homes or cars. In some cases, families simply did not have sufficient money to meet their needs.

Because both single and married mothers were included in the sample, further analysis was conducted using frequency measures to describe differences between these groups of mothers (see Table 19). Analysis showed there were no significant differences. Total numbers of family changes in single parent families (mean 13.7) were somewhat higher than those experienced by two-parent families (mean 12.9). Single mothers reported larger numbers of financial problems but slightly fewer problems related to work-family relations than married mothers. Single mothers reported fewer intra-family changes during the past one year period than did two parent family mothers.

Weighted Family Stress Scores

There was a wide variation in calculated weighted family stress scores (range 39-1205). However, information regarding family stress using weighted family stress scores was essentially identical to information provided by summing the total numbers of family changes. For example, measures of family stress using weighted family stress scores, show that single parent families (mean 569.4) experience slightly more stress than two-parent families (mean 558.4). Similarily, the highest number of family changes were reported by single parent families. Measures of family stress using total numbers of changes experienced by families were shown to be positively related to corresponding stress scores ($r=.9849$, and $p=.000$).

Table 19.

Comparison of Mean Sources of Stress Scores in Single and Two-Parent Families

Sources of Stress	Two-Parent (n=23)		Single Parent (n=15)	
	Mean	Percent	Mean	Percent
Intra-family	5.3	41.2%	5.3	38.7%
Marital	0.4	3.4%	0.7	5.1%
Child Bearing	0.2	1.4%	0.1	0.7%
Finances	1.9	14.9%	2.7	19.7%
Work-family	3.0	23.0%	2.6	18.9%
Illness	0.7	5.4%	0.9	6.6%
Loss	0.3	2.7%	0.4	2.9%
Transitions	0.4	3.4%	0.5	3.6%
Legal	0.7	5.1%	0.7	5.1%
Total Scores	12.9	100.5%*	13.7	101.3%*

*Differences in totals due to rounding error.

Table 20.

Comparison of Mean Family Weighted Stress Scores in Two-Parent and Single Parent Families

Stress Sources	Families			
	Two-Parent (n=23)		Single Parent (n=15)	
	Mean	Percent	Mean	Percent
Intra-family	238.4	42.7	224.1	39.4
Marital	25.9	4.6	42.0	7.4
Child bearing	10.8	1.9	3.0	.5
Finances	56.2	10.1	81.3	14.3
Work-family	124.0	22.2	105.0	18.4
Illness	34.4	6.2	36.2	6.4
Loss	15.6	2.8	16.5	2.9
Transitions	22.3	4.0	18.5	3.3
Legal	30.8	5.5	42.8	7.5
Total Scores	558.4	100.0	569.4	100.1*

* Differences in totals due to rounding error.

Family Coping

Family coping is described in relation to numbers and types of coping strategies used by families. Coping strategies used by single and two- parent families as well as sample and normative scores were compared.

A wide range of family coping scores (59-124) were demonstrated. Acquiring social support from relatives, friends and neighbors accounted for 30.4 percent of the mean coping score for the total sample. Seeking help from community agencies and professional health care workers represented an additional 16.6 percent of coping strategies. Thirty-two percent of the coping behaviors reported by families involved utilization of internal family Resources for purposes of reframing or redefining family situations in more positive ways.

The difference in mean scores between single and two-parent families was 1.6 (see Table 21). One possible reason for single parent families reporting lower coping scores is because these families tend to have less confidence in their abilities to cope with problems. Single parent mothers also reported greater use of passive behaviors such as watching television and waiting for problems to go away. These passive types of behaviors were not found to be effective coping strategies in the general population (Olson et al, 1983).

Mean family coping scores reported by all mothers uncluded in this study using the F-copes questionnaire was 93.1, which is slightly lower than national normative scores for mothers (mean 95.6) (McCubbin, personal correspondence, 1985). Types and numbers

of coping behaviors used by families of children with behavior problems closely paralleled those coping strategies reported by families within the general population. There were, however, two notable differences. First, both single and two- parent families included in this study used fewer coping behaviors related to church participation and seeking advice from a minister than did the national normative sample. Second, the frequency with which families included in this study utilized external family support systems exceeds national normative scores (see Table 21).

Summary of Statistical Analysis

All families included in this study had children admitted to a pediatric psychiatric unit for assessment and treatment of behavior problems. The majority of families were within the School Age stage of family development. The majority of parents had high school education or less and reported their annual family incomes to be less than $30,000. The mean age of the ten girls and thirty boys being assessed for behavior problems was 9.4 years. The majority of these children had demonstrated behavior problems for more than two years.

Mother's scores were accepted as being representative of measures of family functioning. Statistical analysis provided some indication of the relationships between family stress, family coping and behavior problems in children. The analysis clearly indicates that each family having a child with a behavior problem is a unique group of individuals demonstrating great variance in amounts of

stress experienced and in types of coping behaviors used to deal with stressful life events including providing care for children with behavior problems.

Table 21.

Comparison of Mean Family Coping Scores in Two-Parent and Single Parent Families to Normative Scores*

	Families					
	Two-Parent (n=23)		Single Parent (n=15)		Norms	
Coping Strategies	Mean	Percent	Mean	Percent	Mean	Percent
Social Support	28.2	30.1	28.5	30.9	27.8	29.1
Reframing	30.8	32.9	28.6	31.0	30.4	31.8
Spiritual	11.6	12.4	11.5	12.5	16.6	17.3
Passivity	7.7	8.2	8.7	9.4	8.2	8.5
Mobilizing	15.4	16.4	15.5	16.9	12.7	17.3
Total Scores	93.7	100.0*	92.1	100.7	95.6	104.0
Range	59-124		72-113			

* McCubbin, H.I. (1985). Personal Communication.

* Differences in percentage totals due to rounding error.

CHAPTER V

Discussion of Results and Conclusions

Chapter V includes a discussion of the results as well as conclusions derived from data analysis. Limitations of the study are outlined and implications for nursing practice, education and research are presented.

Discussion of Results

The purpose of this study was to explore the relationships between family stress, family coping and children's behavior problems. All forty of the families included in this study had children admitted to hospital for assessment of behavior problems. The majority of families were within the school age stage of family development and most family annual incomes were reported to be less than $30,000. Parental educational status was most commonly reported to be either high school completion or less. Sixteen of the forty families were single parent families. The average number of children per family was 2.3.

The most outstanding feature of these families was the wide variation in amounts of stress experienced and numbers of coping strategies used, and numbers of negative behaviors demonstrated by their children. These families demonstrate that each family must be considered to be a unique unit with very different characteristics and needs. This group of families was experiencing considerably more stress than were normal families within the general population (Olson et al, 1983). Types and numbers of coping strategies used by

families were similar to those used by families in the larger population. These findings suggest that although families of children with behavior problems tend to use a wide variety of coping strategies to meet family demands, these strategies are possibly either ineffective or inappropriate methods of dealing with their specific family problems. However, evaluation of coping strategy effectiveness was beyond the scope of this study.

Correlational Analysis

Analysis using composite measures of family stress, family coping and children's behaviors did not demonstrate significant relationships. However, analysis using central tendency and frequency measures supported directional information provided by correlational analysis. Perhaps if a larger sample size had been used, statistically significant correlations would have been obtained. However, family researchers from Christchurch, New Zealand in their study of over 1200 children, reported that strong correlational measures between family life eventsand childhood behaviors were not obtained (Fergusson, Horwood & Shannon, 1984). These researchers showed that increased numbers of life events are associated with maternal depression but not with child-rearing problems; however, maternal depression is associated with child-rearing problems. It was suggested that perhaps relationships between these variables are linear, resulting in a "causal chain" type of relationship. In other words, life changes are related to maternal depression which in turn, are related to child-rearing

problems. Children's negative behaviors may be reactions to their mother's depressive behaviors. These researchers also suggest that depressed mothers may perceive their children's behaviors to be more negative than these behaviors really are.

A similar relationship may exist between the variables of family stress, family coping and children's behavior problems. When family stress levels increase, numbers of family coping behaviors have a tendency to decrease. In these situations, a demand-capability imbalance may occur making families more vulnerable to additional stress including stress caused by children's behavior problems. According to family stress theory, families of children with behavior problems will respond to stressor pile-up in one of two ways. Some families become overtaxed and give up. They decide that their children's behavior problems should be accepted and tolerated since they are a function of their family situation. These families may underestimate the severity of their children's behaviors. Other families may focus on their children's behavior problems and therefore perceive the severity their children's behaviors to be much worse than they really are. Since parent-child relationships are reciprocal in nature, children may well respond to either situation by demonstrating even more problematic behaviors.

Data analysis using frequency measures indicate that numbers of children's negative behaviors vary according to levels of family stress but this relationship does not appear to be linear. Families within the low stress category reported more childhood behavior problems than did families with high levels of stress. The highest

number of internalizing behaviors and the lowest number of externalizing behaviors were reported by low stress families. Highly stressed families reported the fewest numbers of internalizing behaviors and the lowest total behavior problem scores. Families experiencing moderate levels of stress reported the greatest numbers of externalizing behaviors and the highest total behavior problem scores.

The phenomenon of stressor pile up may serve to explain why low stress families reported more behavior problems than families experiencing high levels of stress. When family stress levels are low, their focus may be on children's behavior problems even though internalizing behaviors may be less less problematic. Low stressed families recorded the highest numbers of coping strategies which would tend to decrease family stress. The numbers of stresses experienced by highly stressed families may serve to mask children's behaviors since these families are attempting to cope with multitudes of problems. In addition, highly stressed families tend to use fewer coping strategies, and perhaps have fewer resources available. Families experiencing moderate levels of stress may have reported the highest number of behavior problems because their children demonstrated the highest number of aggressive and disruptive externalizing behaviors which are most difficult for families to cope with.

Family Stress and Family Coping

The relationship between family stress and family coping was not found to be significant, but the correlation between family stress scores using weighted measures and family coping scores indicated a trend for family stress to be negatively related to family coping. Evidence to support the negative direction of this relationship was provided by measures of frequency and central tendency which showed that as levels of family stress increase, measures of family coping decrease.

Family Coping and Behavior Problems in Children

The positive relationship between family coping and behavior problems in children suggests that there is a trend for family coping efforts to increase as behavior problems increase. In some cases, although family coping efforts increase, the types of coping strategies used may not be effective methods of dealing with children's behavior problems. In these instances, children's problem behaviors increase despite substantial increases in families' coping efforts. The relationship between family coping and social competency behaviors was found to be significant. This finding suggests that when families demonstrate high levels of coping, children respond by demonstrating more social competency behaviors. It does not seem likely that when children demonstrate high numbers of social competency behaviors, families would respond by increasing their coping strategies.

Correlational analysis suggests that types of behavior problems demonstrated by children are related to types of coping strategies used by families. Families of children who demonstrate internalizing behaviors such as depression tend to utilize internal family coping resources. A possible explanation might be that families find it easier to cope with these less visible and perhaps less disruptive childhood behaviors. However, such is not the case for families of children who demonstrate externalizing or acting out behaviors. The negative relationship between external coping and externalizing behaviors suggests that use of external resources, including medical and nursing consultations, may be more effective methods of dealing with disruptive childhood behaviors
than use of internal family resources.

Family Stress and Behavior Problems in Children

Directional information suggests that increases in family stress are accompanied by increases in childhood behavior problems and decreases in social competency behaviors. The reverse of this interpretation must also be considered since decreased social competency behaviors and increased behavior problems of children may serve to increase family stress.

Statistical analysis examining the relationship between family stress and children's behavior problems did not demonstrate a significant relationship. Other researchers have shown that as the numbers of family changes increase, numbers of childhood behavior problems also increase (Beautrais, Fergusson, Shannon, 1982). It is

interesting to note that these researchers reported a range of family changes between 0 to 5. In comparison to the average number of family changes identified in the present study (mean 13.2), numbers of family changes reported in the New Zealand study are very small.

Researchers have made suggestions to improve correlational measures between family stress and children's behavior problems. For example, it has been suggested that short term effects caused by minor life events occurring during the past year may have less effect upon children's behaviors than the more major changes which may have occurred during the children's life span (Fergusson, Horwood, Gretton, Shannon, 1985). Therefore, significant correlational measures of the relationship between minor life events and behavior problems in children may not be obtained. This notion that some stressors have long term effects is in agreement with the Double ABCX Model of Family Adaptation which provided the theoretical framework for the present study. It seems reasonable to assume that measures of both minor and major life event changes should be taken into consideration.

Behavior Problems in Children

Numbers and types of behavior problems demonstrated by boys and girls showed considerable variance within the total sample but differences in behaviors between children from two-parent families and children from single parent families were relatively insignificant. Behavior problem scores were higher for girls,

particularly with regards to externalizing behaviors. Typically, these outwardly aggressive behaviors are more commonly found in boys. Based on stereotypic behavioral expectations, families may have considerable difficulty coping with girl's who demonstrate aggressive and hostile behaviors. These families may require additional resources to enable them to care for their daughters at home.

Family Stress

This group of families reported a mean number of family changes of 13.2 over the past year (range 1-27). In comparison to families included in other studies, these families experienced large numbers of changes. For example, Coddington, (1972) reports that the average number of life event changes experienced by elementary school children is 2.63. Another study comparing life event changes in groups of children with behavior problems (67), healthy children (42), and children experiencing recurrent abdominal pain (30); reported that numbers of life changes experienced by these children were 5.5, 1.9 and 5.0 respectively (Hodges, Kline, Barbero & Flanery, 1984).

The greatest amount of family stress experienced by families was reported to be due to changes in intra-family and work-family relationships and family finances. Similar sources of family stress were reported by Olson et al (1983) in his study of 1200 normal families. Although single parent families reported slightly higher numbers of family changes than two-parent families, sources of stress were very similar.

Family Coping

Families of children with behavior problems use a wide range of coping behaviors. There are few differences noted between single and two-parent families. In families of children with behavior problems, numbers of coping strategies used vary according to family stress levels. However, the types of coping strategies used by families remain constant. These families most frequently used coping strategies such as reframing and acquiring informal social support. Venters (1981) found that families of children with cystic fibrosis used coping strategies which were similar to those used by families of children with behavior problems. However, families of children with cystic fibrosis tended to utilize their religious beliefs and information provided by community agencies in order to find positive meanings (reframing) in their children's illnesses. Informal support systems were also used by these families for purposes of sharing their problems and consequently reducing family stress. These two groups of families are similar in that chronic behavior problems and cystic fibrosis are both long term childhood disabilities. In order for families to deal with these types of long term problems, external family coping resources are required.

Comparison of coping strategies used by families of children with behavior problems to the larger population norms provided by McCubbin (personal communication, 1985) and Olson et al, (1983) reveal two major differences in family coping. The mean coping scores of mothers of children with behavior problems is somewhat lower than mean scores provided by mothers from the general

population. In descending order of use, families of children with behavior problems use the following coping strategies: reframing, utilization of informal and formal social support systems, obtaining spiritual support and passive acceptance of their life situations. The only difference between families of children with behavior problems and the larger population is in the use of spiritual support systems. There are two possible reasons for this difference between these two groups of families. The majority of families of children with behavior problems were within the school age stage of development. It has been demonstrated that young families rely less on spiritual support than do older families (Olson et al, 1983). In addition, nearly all of the 1200 families included in the larger study were obtained from memberships of various Lutheran churches. Therefore, church affiliation was overly represented in the larger study.

Similarities and Differences Between Single and Two-Parent Families

There are few differences between single and two-parent families with regard to numbers of stressful events experienced, numbers and types of coping strategies used, and numbers and types of behavior problems demonstrated by children. This is in direct opposition to the popular belief that single parent families experience more life event stressors and have fewer available coping resources. One explanation for the lack of differences found between two-parent and single parent families may be that this sample was self-selected. Families included in this study volunteered to

participate, and therefore, may share similar family characteristics which are not clearly understood. These characteristics may be different from characteristics of those families who refused to participate in the study.

Instruments used for data collection measure numbers of stressful events, coping strategies and children's behaviors. These instruments do not measure amounts of stress individual families experience although sources of stress may be similar. It has been suggested that within two-parent families, marital discord contributes significantly to development of behavior problems in children (Emery, 1984). It was beyond the scope of this study to provide measures of marital harmony, but if marital discord did exist in some two-parent families, it may have increased amounts of stress experienced so that stress levels in these two-parent families equalled stress levels experienced by single parent families who had fewer available resources.

Conclusions

Concluding statements respond directly to the specific research question and the six research objectives. In this study of families of children with behavior problems:

1. Relationships between composite measures of family life event demands (family stress), family coping and behavior problems in children were not found to be statistically significant.
2. Numbers of coping strategies used by families decreased as levels of family stress increased.

3. Families utilized different coping strategies to deal with different types of childhood behavior problems.
4. As numbers of family changes increased, a trend toward an increase in numbers of behavior problems in children increased.
5. There was a variance in the types and numbers of behaviors demonstrated by children being assessed for behavior problems.
6. Families of children with behavior problems differ in numbers of coping strategies used but types of strategies used are very similar.
7. Families of children with behavior problems experience different levels of stress but sources of stress are very similar.

Limitations of the Study

Limitations of this study are directly related to the sample used and the outcome of the statistical analysis. Because a convenience sample was used, it is not possible to generalize or apply the results to the general population. However, the intent of this correlational study was to provide a description of types of stress experienced and coping strategies used by families caring for children with behavior problems as well as to describe the relationships between these variables.

Statistically significant correlations between the major variables were not obtained. It became necessary to rely upon directional information provided by the correlational analysis but central tendency and frequency measures confirmed this directional

information. Replication of this study using a larger sample size and measuring amounts of stress families experience as a result of children's behavior problems as well as specific coping strategies used to cope with children's behavior problems would result in more specific descriptions of these relationships.

Strengths of This Study

This study was based upon an established theoretical framework and utilized two of the data collection instruments designed for use with this framework. Reliability and validity have been established for all of the instruments used in this study. This study provided the initial groundwork and some information upon which further studies can be based. It was the first of many steps required for development of a screening program which will efficiently and accurately identify families who are at risk for having children develop behavior problems.

Implications for Nursing

Families of children with behavior problems experience stress arising from many sources and use a variety of strategies to cope with family stress. This knowlege is of considerable importance for clinical nurses caring for families of children with behavior problems in both community and hospital settings. Accurate family assessments must include evaluation of amounts of stress being experienced by families and coping strategies used as well as evaluation of childhood behavior problems. This study shows that

some families do not report children's problem behaviors as being significant, yet these same families are experiencing extremely high levels of stress making their participation and cooperation in their children's treatment programs impossible. Some families may not recognize the severity of their children's behavior problems because they are overloaded with many other problems at home. These families may require considerable help in coping with other sources of stress before their children's treatment can be successful. On the other hand, families having relatively low levels of stress may focus on their children's negative behaviors. In these instances, nurses must first deal with the fact that these families may perceive their children's behavior problems to be more severe than clinical testing and observation would warrant.

In addition, nursing educators must provide nursing students with a sound theoretical background and an opportunity to develop realistic family assessment skills. Stress and coping theory has utility for organizing nursing practice in a variety of clinical settings.

Finally, further research is required to assist practitioners to understand the effects of stress on all families including those who have children with behavior problems. Furthermore, additional research can help determine which family factors may serve as reliable predictors of the development of behavior problems in children.

BIBLIOGRAPHY

Achenbach, Thomas M., & Edelbrock, Craig, A. (1978). The classification of child psychopathology: A review and analysis of empirical efforts. Psychological Bulletin, 85, 1275-1301.

Achenbach, Thomas M., & Edelbrock, Craig, S. (1979). The child behavior profile:11. Boys aged 12-16 and girls aged 6-11 and 12-16. Journal of Consulting and Clinical Psychology, 47, 223-233.

Achenbach, Thomas M. (1979). The child behavior profile: An empirically based system for assessing children's behavior problems and competencies. International Journal of Mental Health, 7, 24-42.

Achenbach, Thomas M, & Edelbrock, C.S. (1981). Behavioral problems and competencies reported by parents of normal and disturbed children aged four through sixteen. Monographs of the Society for Research in Child Development, 46,(1,Serial No. 188).

Achenbach, Thomas M., & Edelbrock, Craig. (1983). Manual for the child behavior checklist and revised child behavior profile. United States of America: Queen City Printers.

American Psychiatric Association (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington: Author.

Aragona, John A., & Eyberg, Sheila M. (1981). Neglected children: Mothers' report of child behavior problems and observed verbal behavior. Child Development, 52, 596-602.

Baker, Alma W., & Cook, Gwen S. (1983). Stress, adaptation and the black individual: Implications for nursing education. Journal of Nursing Education, 22, 237-242.

Baker, John Q., & Wagner, Nathaniel N. (1966). Social class and treatment in a child psychiatry clinic. Archives of General Psychiatry, 14, 129-133.

Beautrais, A.L., Fergusson, D.M., & Shannon, F.T. (1982). Family life events and behavior problems in preschool-aged children. Pediatrics, 70, 774-779.

Beautrais, A.L., Fergusson, D.M., & Shannon, F.T. (1982). Life events and childhood morbidity: A prospective study. Pediatrics, 70, 935-940.

Bell, Richard Q. (1981). Four new research approaches to socialization: An evaluation of their advantages and disadvantages. Journal of Abnormal Child Psychology, 9, 341-345.

Blacher, Jan, & Turnbull, Ann P. (1983). Are parents mainstreamed? A survey of parent interactions in the mainstreamed preschool. Education and Training of the Mentally Retarded, 2, 10-16.

Brailey, Joan L. (1984). Coping strategies used by mothers of preschool children. University of Toronto: Faculty of Nursing.

Burr, Wesley (1973). Theory construction and the sociology of the family. New York: Wiley.

Chiriboga, David A., Jenkins, Gary, & Bailey, June (1983). Stress and coping among hospice nurses: Test of an analytic model. Nursing Research, 32, 294-299.

Cobb, Charles W. (1972). Community mental health services and the lower socioeconomic classes. A summary of research literature on outpatient treatment (1963-1969). American Journal of Orthopsychiatry, 42, 404-413.

Cobb, Sidney. (1976). Social support as a moderator of stress. Psychosomatic Medicine, 38, 300-314.

Coddington, R. Dean. (1972). Significant life events as etiological factors of children-11: A study of a normal population. Journal of Psychosomatic Research, 16, 205-213.

Cohen, Frances, & Lazarus, Richard S. (1973). Active coping processes, coping dispositions, and recovery from surgery. Pyschosomatic Medicine, 35, 375-389.

Cohen, Jacob (1977). Statistical power analysis for the behavioral sciences (Rev. ed.). New York: Academic Press.

Cronenwett, Linda, & Brickman, Phillip (1983). Models of helping and coping in childbirth. Nursing Research, 32, 84-88.

Csapo, Marg (1981). Children with behavioral and social disorders: A Canadian focus. Vancouver: Carl the Printers Graphic Services, Ltd.

Dean, Alfred, & Lin, Nan (1977). The stress-buffering role of social support. Problems and prospects for systematic investigation. Journal of Nervous and Mental Disease, 165, 403-417.

Dohrenwend, Barbara S., & Dohrenwend, Bruce P. (1970). Class and race as status-related sources of stress. In S. Levine & N.A. Scotch (Eds.), Social stress. Chicago: Aldine Publishing Company.

Dohrenwend, Barbara S., Krasnoff, L., Askensay, A.R., & Dohrenwend, Bruce P. (1978). Exemplification of a method for scaling life events: The PERI life events scale. Journal of Health and Social Behavior, 19, 205-229.

Dunn, K., & Kendrick, C. (1980). The arrival of a sibling: Changes in interaction between mother and first-born child. Journal of Child Psychology and Psychiatry, 21, 119-132.

Duval, E. (1957). Family development. Philadelphia: Lippincott.

Erickson, Helen, & Swain, Mary Ann (1982). A model for assessing potential adaptation to stress. Research in Nursing and Health, 5, 93-101.

Fergusson, D.M., Horwood, L.J., & Shannon, F.T. (1984). Relationship of family life events, maternal depression and child-rearing problems. Pediatrics, 73, 773-776.

Fergusson, D.M., Horwood, L.J., Gretton, M.E., & Shannon, F.T. (1985). Family life events, maternal depression, and maternal and teacher descriptions of child behavior. Pediatrics, 75, 30-35.

Filsinger, Erik E., & Lewis, Robert A. (Eds.) (1981). Assessing marriage: New behavioral approaches. Beverly Hills: Sage Publications.

Folkman, Susan, & Lazarus, Richard S. (1980). An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 21, 219-239.

Friedman, Marilyn M. (1981). Family nursing: Theory and assessment. Norwalk, Connecticut: Appleton Century Crofts.

Friedman, Stanford B., Chodoff, Paul, Mason, John W., & Hamburg, David A. (1963). Behavioral observations on parents anticipating the death of a child. Pediatrics, 32, 610-625.

Godfrey, Anne E. (1955). A study of nursing care designed to assist hospitalized children and their parents in their separation. Nursing Research, 4, 52-69.

Goffman, Erving (1963). Stigma. New York: Prentice-Hall Inc.

Grecas, Viktor (1979). The influence of social class on socialization. In W.R. Burr, R. Hill, F.I. Nye, & I.L. Reiss (Eds.), Contemporary theories about the family, Vol.1. New York: MacMillan Publishing Co., Inc.

Gresham, Frank M. (1982). A model for the behavioral assessment of behavior disorders in children: Measurement considerations and practical application. Journal of School Psychology, 20, 131-144.

Griest, Douglas L., Forehand, Rex, Wells, Karen C., & McMahon, A. (1980). An examination of differences between nonclinic and behavior-problem clinic-referred children and their mothers. Journal of Abnormal Psychology, 89, 497-500.

Guralnick, Micheal (1976). The value of integrating handicapped and non-handicapped preschool children. American Journal of Orthopsychiatry, 46, 237-245.

Gustafson, Tracy L. (1984). Epistat statistical package for the IBM personal computer. Version 3.0, Texas.

Hamburg, D.A., & Adams, J.E. (1967). A perspective on coping behavior: Seeking and utilizing information in major transitions. Archives of General Psychiatry, 17, 277-284.

Hansen, Donald A., & Johnson, Vicky A. (1979). Rethinking family stress theory: Definitional aspects. In W.R. Burr, R. Hill, F.I. Nye, & I.L Reiss. (Eds.). Contemporary theories about the family. Vol.1. New York: The Free Press.

Hetherington, E. Mavis (1984). Stress and coping in children and families. In A. Doyle, D. Gold, & D.S. Moskowitz (Eds.), Children in families under stress. New directions for child development, 24. San Francisco: Jossy-Bass.

Hill, Reuben (1949). Families under stress. Adjustment to the crisis of war separation. New York: Harper Row.

Hill, Reuben (1958). Generic features of families under stress. Social Casework, 49, 139-150.

Hinz, Eunice (1980). Coping strategies of a two year old girl hospitalized for cardiac catheterization. Maternal-Child Nursing Journal, 1-6.

Hodges, K., Kline, J.J., Barbero, G., & Flanery, R. (1984). Life events occurring in families of children with recurrent abdominal pain. Journal of Psychosomatic Research, 28, 185-188.

Hollingshead, A.B., & Redlich, F.C. (1958). Social class and mental illness. New York: John Wiley and Sons, Inc.

Holmes, R.H., & Rahe, R.H. (1967). The social readjustment rating scale. Journal of Psychosomatic Research, 11, 213-218.

Kanner, A.D., Coyne, J.C., Schaefer, C., & Lazarus, R.S. (1981). Comparison of two modes of stress measurement: Daily hassles and uplifts vs. major life events. Journal of Behavioral Medicine, 4, 1-39.

Lewin, P., Nelson, R.E., & Tollefson, N. (1983). Teacher attitudes toward disruptive children. Elementary School Guidance and Counselling, 188-193.

Lindemann, Erich (1977). Symptomatology and management of acute grief. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology. New York: Columbia University Press.

Links, Paul S. (1983). Community surveys of the prevalence of childhood psychiatric disorders: A review. Child Development, 54, 531-548.

Lipowski, A.J. (1970). Physical illness: The individual and the coping process. Psychiatry in Medicine, 1, 91-102.

Lurie, Olga R. (1970). The emotional health of children in the family setting. Community Mental Health Journal, 6, 229-235.

Lurie, Olga R. (1974). Parents' attitudes towards children's problems and toward use of mental health services: Socioeconomic differences. American Journal of Orthopsychiatry, 44, 109-120.

McCubbin, Hamilton I. (1985, September). Surviving change: Coping with stress in the 1980's. Paper presented at the 1985 E.L. Empey Lecture. University of Alberta, Edmonton.

McCubbin, H.I., Joy, C.B., Cauble, A.E., Comeau, J.K., Patterson, J.M., & Needle, R.H. (1980). Family stress and coping: A decade review. Journal of Marriage and the Family, 112, 855-871.

McCubbin, H.I., Patterson, Joan M., & Wilson, Lance R. (1981). Family inventory of life events and changes. In C. Davidson (Ed.), Systematic assessment of family stress, resources and coping: Tools for research, education and clinical intervention. St. Paul: University of Minnesota.

McCubbin, H.I., Olson, David H., & Larsen, Andrea S. (1981). Family crisis oriented personal scales. In C. Davidson (Ed.), Systematic assessment of family stress, resources and coping: Tools for research, education and clinical intervention. St. Paul: University of Minnesota.

McCubbin, H. I., & Patterson, J.M. (1981). Family stress theory: The ABCX and double ABCX models. In C. Davidson (Ed.), Systematic assessment of family stress, resources and coping: Tools for research, education and clinical intervention. St. Paul: University of Minnesota.

McCubbin, H.I., & Patterson, J.A. (1983). Stress: The family inventory of life events and changes. In E. Filsinger (Ed.), Marriage and family assessment: A source book for family therapy. Beverly Hills: Sage Publications.

McGee, Rob, Silva, Phil, & Williamson, Sheila (1984). Behavior problems in a population of seven year old children: Prevalence, stability and types of disorder. A research report. Journal of Child Psychology and Psychiatry 25, 251-259.

Marcus, Lee M. (1977). Patterns of coping in families of psychotic children. American Journal of Orthopsychiatry, 47, 388-398.

Mash, Eric J. (1984). Families with problem children. In A. Doyle, D. Gold, D.S. Moskowitz (Eds.), Children in families under stress: New directions for child development, 24. San Francisco: Jossey-Bass.

Matteson, Micheal R., & Ivanevich, J.M. (1982). Stress and the medical technologist 11: Sources and coping mechanisms. American Journal of Medical Technology, 48, 169-176.

Mausner, J., & Kramer, J. (1985). Epidemiology - An introductory text. Philadelphia: W.B. Saunders.

Monat, A., & Lazarus, R.S. (Eds.) (1977). Stress and coping: An anthology. New York: Columbia University Press.

Neuman, Betty. (1982). The Neuman systems model: Application to nursing education and practice. East Norwalk: Appleton Century Crofts.

Olson, David, H., McCubbin, H.I., Barnes, H., Larsen, A., Muxen, M., & Wilson, M. (1983). Families: What makes them work. Beverly Hills: Sage Publications.

Patterson, Joan M., & McCubbin, H.I. (1983). The impact of family life events and changes on the health of a chronically ill child. Family Relations, 32, 255-264.

Patterson, Joan M., & McCubbin, H.I. (1984). Gender roles and coping. Journal of Marriage and the Family, 2, 95-104.

Rutter, Michael (1981). Stress, coping and development: Some issues and some questions. Journal of Child Psychology and Psychiatry, 22, 323-356.

Rutter, Michael (1985). Family and school influences on behavioral development. Journal of Child Psychology and Psychiatry, 26, 349-368.

Selye, Hans (1977). Selections from the stress of life. In A. Monat & R.S. Lazarus (Eds.), Stress and coping: An anthology. New York: Columbia University Press.

Silverman, Morton (1979). Beyond the mainstream: The special needs of the chronic child patient. American Journal of Orthopsychiatry, 49, 62-68.

Smith, Alexander (1978). Encountering the family system in school related behavior problems. Psychology in the Schools, 15, 379-386.

Sonne, J.C. (1967). Entropy and family therapy. In G.H. Zuk (Ed.), Family therapy and disturbed families. Palo Alto: Science Behavior Books.

SPSS Inc. (1983). SPSS-X users guide. A complete guide to Spssx language and operations. New York: McGraw-Hill Book Company.

Stott, D.H. (1978). Epidemiological indicators of the origins of behavior disturbance as measured by the Bristol Social Adjustment Guides. Genetic Psychology Monographs, 98, 128, 147.

Susser, M., Hopper, K., & Richman, J. (1983). Society, culture and health. In D. Mechanic (Ed.), Handbook of health, health care and the health professions. New York: The Free Press.

Tucker, C.A. (1978). Parental perceptions of child-rearing problems. Child Psychiatry and Human Development, 8, 145-161.

Venters, M. (1981). Familial coping with chronic and severe childhood illness; the case of cystic fibrosis. Social Science Medicine, 15A, 289-297.

Visotsky, H., Hamburg, D.A., Goss, M.E., & Lebovits, B.Z. (1961). Coping behavior under extreme stress. Archives of General Psychiatry, 15, 423-448.

Vogel, E.F., & Bell, N.W. (1960). The emotionally disturbed child as the family scapegoat. In N.W. Bell & E.F. Vogel (Eds.), A modern introduction to the family. New York: The Free Press.

Werner, E.E., & Smith, R.S. (1977). Kauai's children come of age. Honolulu: The University Press of Hawaii.

Werry, J.S., & Quay, H.C. (1971). The prevalence of behavior symptoms in younger elementary school children. American Journal of Orthopsychiatry, 41, 136-143.

Whaley, L.F. & Wong, D.L. (1983). Nursing care of infants and children. C.V. Mosby Co.: Toronto.

Williamson, Y.M. (1981). Research methodology and its application to nursing. New York: John Wiley and Sons.

Winsberg, B.G., Bailer, I., Kupietz, S., Botti, E., & Balka, E.B. (1980). Home vs. hospital care of children with behavior disorders: A controlled investigation. Archives of General Psychiatry, 37, 413-418.

Zamerowski, S.T. (1982). Helping families to cope with handicapped children. Topics in Clinical Nursing, 7, 41-56.

APPENDICES

APPENDIX A

Introductory Letter to Parents

Dear Parents:

I am a nurse and I am conducting a study which will obtain information that will help me and other nurses to know more about how we can help families who are caring for children with behavior problems. In order to obtain this information, I need parents to fill out three questionnaires and to give me some general information about their families. This will take you approximately one half hour. I will meet you at the hospital unit at any time which is convenient to you before your child is discharged.

I would very much appreciate your help. Please leave your phone number with the nurses on the unit so that I may call you to set up an appointment.

Thank-you very much for your help.

Yours truly,

Margaret E. Lock, B.N. (432-5924)

APPENDIX B

Informed Consent Form

Project Title: Relationship Between Family Life Event Demands, Family Coping and Behavior Problems in Children.

Investigator: Margaret E. Lock, B.N. M.N. Candidate
(432-5924)
Faculty of Nursing, University of Alberta

Advisor: Dr. Elizabeth Davies

The purpose of this research project is to learn more about the problems families encounter when they are caring for a child with behavior problems. This information will help nurses in the hospital and the community to provide better nursing care for other families who have children with behavior problems. This study is being completed as partial fulfillment of the requirements for obtaining a masters degree in nursing.

I agree to participate in this study and will be provided with a copy of the consent form. I understand that I will be required to fill out three questionnaires and answer some general questions about my family which will take me approximately one half hour.

I understand that all information will be kept confidential and that neither I nor my family will be identified on any of the questionnaires or in the research report. The data will be kept in a locked drawer until the study is completed at which time all data will be destroyed. I have been given the opportunity to ask the researcher questions about the study and a summary will be made available to me at the end of the study.

I understand that if I or my husband (wife) wish to withdraw from the study at any time we may do so by simply contacting the researcher at the above number. Withdrawal from the study will in no way affect the care provided to my child.

I also understand that there is no direct benefit nor is there any risk involved to myself or my family due to my involvement in this study.

----------	----------
Signature of mother/father	Signature of researcher
----------	----------
Signature of witness	Date

APPENDIX C

Demographic Information

Please fill out the following information sheet which will give the researcher some general information about your family.

How many children do you have in your family? (Please write in the number of children you have in each age group)

_____ Under 5 years of age
_____ 6 to 13 years of age
_____ 14 to 18 years of age
_____ over 19 years of age

Birth dates of your children: _____

_____ _____

Your birth data: _____

Are you presently: (Please circle number)

1. Employed
2. Unemployed
3. Full time homemaker
4. Retired

If you are employed, please describe your occupation?

Title of your position: _____

What kind of work do you do?

_____

_____

_____

What was your approximate net family income for 1984? (Please circle number)

1. Less than $10,000
2. $11,000 to $20,000
3. $21,000 to $30,000
4. $31,000 to $40,000
5. $41,000 to $50,000
6. Over $50,000

What is the highest level of education that you have completed? (Please circle number)

1. No formal education
2. Some grade school
3. Completed grade school
4. Some high school
5. Completed high school
6. Some college
7. Completed college (what program)_____
8. Some graduate work
9. A graduate degree (specify degree and major)

_____

How long ago did you first notice that your child had a behavior problem? (Please circle number)

1. 1-3 months ago
2. 4-6 months ago
3. 7-12 months ago
4. 13-24 months ago
5. More than 24 months ago

How did you decide to have your child assessed (tested) on the hospital unit? (Please circle number)

1. A family decision
2. Teacher's suggestion
3. Nurses's suggestion
4. Family doctor's suggestion
5. Other (Please explain)_____

Marital Status (Please circle number)

1. Married
2. Single
3. Divorced

Has your child been admitted to a unit similar to this nursing unit before? (Please circle number)

1. Yes
2. No

CHILD BEHAVIOR CHECKLIST FOR AGES 4-16

For office use only
ID #

CHILD'S NAME

SEX ☐ Boy ☐ Girl

AGE

RACE

TODAY'S DATE

Mo. _____ Day _____ Yr _____

CHILD'S BIRTHDATE

Mo. _____ Day _____ Yr _____

GRADE IN SCHOOL

PARENT'S TYPE OF WORK *(Please be specific—for example: auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant, even if parent does not live with child.)*

FATHER'S TYPE OF WORK: _____

MOTHER'S TYPE OF WORK: _____

THIS FORM FILLED OUT BY:

☐ Mother
☐ Father
☐ Other *(Specify)*

I. Please list the sports your child most likes to take part in. For example: swimming, baseball, skating, skate boarding, bike riding, fishing, etc.

☐ None

Compared to other children of the same age, about how much time does he/she spend in each?

Compared to other children of the same age, how well does he/she do each one?

	Don't Know	Less Than Average	Average	More Than Average	Don't Know	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐	☐	☐

II. Please list your child's favorite hobbies, activities, and games, other than sports. For example: stamps, dolls, books, piano, crafts, singing, etc. (Do not include T.V.)

☐ None

Compared to other children of the same age, about how much time does he/she spend in each?

Compared to other children of the same age, how well does he/she do each one?

	Don't Know	Less Than Average	Average	More Than Average	Don't Know	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐	☐	☐	☐	☐
b. _____	☐	☐	☐	☐	☐	☐	☐	☐
c. _____	☐	☐	☐	☐	☐	☐	☐	☐

III. Please list any organizations, clubs, teams, or groups your child belongs to.

☐ None

Compared to other children of the same age, how active is he/she in each?

	Don't Know	Less Active	Average	More Active
a. _____	☐	☐	☐	☐
b. _____	☐	☐	☐	☐
c. _____	☐	☐	☐	☐

IV. Please list any jobs or chores your child has. For example: paper route, babysitting, making bed, etc.

☐ None

Compared to other children of the same age, how well does he/she carry them out?

	Don't Know	Below Average	Average	Above Average
a. _____	☐	☐	☐	☐
b. _____	☐	☐	☐	☐
c. _____	☐	☐	☐	☐

V. 1. About how many close friends does your child have? ☐ None ☐ 1 ☐ 2 or 3 ☐ 4 or more

2. About how many times a week does your child do things with them? ☐ less than 1 ☐ 1 or 2 ☐ 3 or more

VI. Compared to other children of his/her age, how well does your child:

	Worse	About the same	Better
a. Get along with his/her brothers & sisters?	☐	☐	☐
b. Get along with other children?	☐	☐	☐
c. Behave with his/her parents?	☐	☐	☐
d. Play and work by himself/herself?	☐	☐	☐

VII. 1. Current school performance—for children aged 6 and older:

☐ Does not go to school

	Failing	Below average	Average	Above average
a. Reading or English	☐	☐	☐	☐
b. Writing	☐	☐	☐	☐
c. Arithmetic or Math	☐	☐	☐	☐
d. Spelling	☐	☐	☐	☐
Other academic subjects—for example: history, science, foreign language, geography. e. _____	☐	☐	☐	☐
f. _____	☐	☐	☐	☐
g. _____	☐	☐	☐	☐

2. Is your child in a special class?

☐ No ☐ Yes—what kind?

3. Has your child ever repeated a grade?

☐ No ☐ Yes—grade and reason

4. Has your child had any academic or other problems in school?

☐ No ☐ Yes—please describe

When did these problems start?

Have these problems ended?

☐ No ☐ Yes—when?

VIII. Below is a list of items that describe children. For each item that describes your child now or within the past 6 months, please circle the 2 if the item is very true or often true of your child. Circle the 1 if the item is somewhat or sometimes true of your child. If the item is not true of your child, circle the 0. Please answer all items as well as you can, even if some do not seem to apply to your child.

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 1. Acts too young for his/her age
0 1 2 2. Allergy (describe): _____
_____
0 1 2 3. Argues a lot
0 1 2 4. Asthma
0 1 2 5. Behaves like opposite sex
0 1 2 6. Bowel movements outside toilet
0 1 2 7. Bragging, boasting
0 1 2 8. Can't concentrate, can't pay attention for long
0 1 2 9. Can't get his/her mind off certain thoughts; obsessions (describe): _____
_____
0 1 2 10. Can't sit still, restless, or hyperactive
0 1 2 11. Clings to adults or too dependent
0 1 2 12. Complains of loneliness
0 1 2 13. Confused or seems to be in a fog
0 1 2 14. Cries a lot
0 1 2 15. Cruel to animals
0 1 2 16. Cruelty, bullying, or meanness to others
0 1 2 17. Day-dreams or gets lost in his/her thoughts
0 1 2 18. Deliberately harms self or attempts suicide
0 1 2 19. Demands a lot of attention
0 1 2 20. Destroys his/her own things
0 1 2 21. Destroys things belonging to his/her family or other children
0 1 2 22. Disobedient at home
0 1 2 23. Disobedient at school
0 1 2 24. Doesn't eat well
0 1 2 25. Doesn't get along with other children
0 1 2 26. Doesn't seem to feel guilty after misbehaving
0 1 2 27. Easily jealous
0 1 2 28. Eats or drinks things that are not food (describe): _____
_____
0 1 2 29. Fears certain animals, situations, or places, other than school (describe): _____
_____
0 1 2 30. Fears going to school
0 1 2 31. Fears he/she might think or do something bad
0 1 2 32. Feels he/she has to be perfect
0 1 2 33. Feels or complains that no one loves him/her
0 1 2 34. Feels others are out to get him/her
0 1 2 35. Feels worthless or inferior
0 1 2 36. Gets hurt a lot, accident-prone
0 1 2 37. Gets in many fights
0 1 2 38. Gets teased a lot
0 1 2 39. Hangs around with children who get in trouble
0 1 2 40. Hears things that aren't there (describe):
_____
_____
0 1 2 41. Impulsive or acts without thinking
0 1 2 42. Likes to be alone
0 1 2 43. Lying or cheating
0 1 2 44. Bites fingernails
0 1 2 45. Nervous, highstrung, or tense
0 1 2 46. Nervous movements or twitching (describe):
_____
_____
0 1 2 47. Nightmares
0 1 2 48. Not liked by other children
0 1 2 49. Constipated, doesn't move bowels
0 1 2 50. Too fearful or anxious
0 1 2 51. Feels dizzy
0 1 2 52. Feels too guilty
0 1 2 53. Overeating
0 1 2 54. Overtired
0 1 2 55. Overweight
56. Physical problems without known medical cause:
0 1 2 a. Aches or pains
0 1 2 b. Headaches
0 1 2 c. Nausea, feels sick
0 1 2 d. Problems with eyes (describe):
_____
0 1 2 e. Rashes or other skin problems
0 1 2 f. Stomachaches or cramps
0 1 2 g. Vomiting, throwing up
0 1 2 h. Other (describe): _____
_____

Please see other side

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 57. Physically attacks people
0 1 2 58. Picks nose, skin, or other parts of body (describe): _____
60
0 1 2 59. Plays with own sex parts in public
16
0 1 2 60. Plays with own sex parts too much
0 1 2 61. Poor school work
0 1 2 62. Poorly coordinated or clumsy
0 1 2 63. Prefers playing with older children
20
0 1 2 64. Prefers playing with younger children
0 1 2 65. Refuses to talk
0 1 2 66. Repeats certain acts over and over; compulsions (describe): _____
0 1 2 67. Runs away from home
0 1 2 68. Screams a lot
25
0 1 2 69. Secretive, keeps things to self
0 1 2 70. Sees things that aren't there (describe):
0 1 2 71. Self-conscious or easily embarrassed
0 1 2 72. Sets fires
0 1 2 73. Sexual problems (describe):
30
0 1 2 74. Showing off or clowning
0 1 2 75. Shy or timid
0 1 2 76. Sleeps less than most children
0 1 2 77. Sleeps more than most children during day and/or night (describe): _____
0 1 2 78. Smears or plays with bowel movements
35
0 1 2 79. Speech problem (describe): _____
0 1 2 80. Stares blankly
0 1 2 81. Steals at home
0 1 2 82. Steals outside the home
0 1 2 83. Stores up things he/she doesn't need (describe):
40
0 1 2 84. Strange behavior (describe): _____
0 1 2 85. Strange ideas (describe):
0 1 2 86. Stubborn, sullen, or irritable
0 1 2 87. Sudden changes in mood or feelings
0 1 2 88. Sulks a lot
45
0 1 2 89. Suspicious
0 1 2 90. Swearing or obscene language
0 1 2 91. Talks about killing self
0 1 2 92. Talks or walks in sleep (describe):
0 1 2 93. Talks too much
50
0 1 2 94. Teases a lot
0 1 2 95. Temper tantrums or hot temper
0 1 2 96. Thinks about sex too much
0 1 2 97. Threatens people
0 1 2 98. Thumb-sucking
55
0 1 2 99. Too concerned with neatness or cleanliness
0 1 2 100. Trouble sleeping (describe):
0 1 2 101. Truancy, skips school
0 1 2 102. Underactive, slow moving, or lacks energy
0 1 2 103. Unhappy, sad, or depressed
60
0 1 2 104. Unusually loud
0 1 2 105. Uses alcohol or drugs (describe):
0 1 2 106. Vandalism
0 1 2 107. Wets self during the day
0 1 2 108. Wets the bed
65
0 1 2 109. Whining
0 1 2 110. Wishes to be of opposite sex
0 1 2 111. Withdrawn, doesn't get involved with others
0 1 2 112. Worrying
113. Please write in any problems your child has that were not listed above:
0 1 2 _____
70
0 1 2 _____
0 1 2 _____

PLEASE BE SURE YOU HAVE ANSWERED ALL ITEMS.

UNDERLINE ANY YOU ARE CONCERNED ABOUT.

University of Minnesota
Family Social Science
290 McNeal Hall
St Paul, MN 55108
Medical Education and Research
Association of
Gillette Children's Hospital

Family Health Program
FORM C
1983

IID ☐☐☐☐
GID ☐☐☐
FID ☐☐☐

FILE

Family Inventory of Life Events and Changes

Hamilton I. McCubbin Joan M. Patterson Lance R. Wilson

PURPOSE

Over their life cycle, all families experience many changes as a result of normal growth and development of members and due to external circumstances. The following list of family life changes can happen in a family at any time. Because family members are connected to each other in some way, a life change for any one member affects all the other persons in the family to some degree.

"FAMILY" means a group of two or more persons living together who are related by blood, marriage or adoption. This includes persons who live with you *and* to whom you have a long term commitment.

DIRECTIONS

"DID THE CHANGE HAPPEN IN YOUR FAMILY?"
Please read each family life change and decide whether it happened to any member of your family—including you.

- DURING THE LAST YEAR
  First, decide if it happened any time **during** the last 12 months and check YES or NO.
- BEFORE LAST YEAR
  Second, for *some family changes* decide if it happened any time **before** the last 12 months and check YES or NO. It is okay to check YES twice if it happened both times—before last year and during the past year.

During Last 12 Months Yes	No
☐	☐

Before Last 12 Months Yes	No
☐	☐

FAMILY LIFE CHANGES	DID THE CHANGE HAPPEN IN YOUR FAMILY? During Last 12 Months Yes	No	Before Last 12 Months Yes	No
I. INTRA-FAMILY STRAINS				
1. Increase of husband/father's time away from family	☐	☐ 12	☐	☐
2. Increase of wife/mother's time away from family	☐	☐	☐	☐
3. A member appears to have emotional problems	☐	☐	☐	☐
4. A member appears to depend on alcohol or drugs	☐	☐	☐	☐
5. Increase in conflict between husband and wife	☐	☐		
6. Increase in arguments between parent(s) and child(ren)	☐	☐		
7. Increase in conflict among children in the family	☐	☐		
8. Increased difficulty in managing teenage child(ren)	☐	☐		
9. Increased difficulty in managing school age child(ren) (6-12 yrs.)	☐	☐		
10. Increased difficulty in managing preschool age child(ren) (2½-6 yrs.)	☐	☐		
11. Increased difficulty in managing toddler(s) (1-2½ yrs.)	☐	☐		
12. Increased difficulty in managing infant(s) (1-2½ yrs.)	☐	☐		
13. Increase in the amount of "outside activities" which the child(ren) are involved in	☐	☐		
14. Increased disagreement about a member's friends or activities	☐	☐		
15. Increase in the number of problems or issues which don't get resolved	☐	☐		
16. Increase in the number of tasks or chores which don't get done	☐	☐		
17. Increased conflict with in-laws or relatives	☐	☐ 17		
II. MARITAL STRAINS				
18. Spouse/parent was separated or divorced	☐	☐	☐	☐
19. Spouse/parent has an "affair"	☐	☐	☐	☐
20. Increased difficulty in resolving issues with a "former" or separated spouse	☐	☐		
21. Increased difficulty with sexual relationship between husband and wife	☐	☐ 21		

Please turn over and complete ▸

FAMILY LIFE CHANGES	DID THE CHANGE HAPPEN IN YOUR FAMILY? During Last 12 Months Yes	No	Before Last 12 Months Yes	No
III. PREGNANCY AND CHILDBEARING STRAINS				
22 Spouse had unwanted or difficult pregnancy	☐	☐	☐	☐
23 An unmarried member became pregnant	☐	☐	☐	☐
24 A member had an abortion	☐	☐	☐	☐
25 A member gave birth to or adopted a child	☐	☐		
IV FINANCE AND BUSINESS STRAINS				
26 Took out a loan or refinanced a loan to cover increased expenses	☐	☐	☐	☐
27 Went on welfare	☐	☐	☐	☐
28 Change in conditions (economic, political, weather) which hurts the family business	☐	☐	☐	☐
29 Change in Agriculture Market, Stock Market, or Land Values which hurts family investments and or income	☐	☐	☐	☐
30 A member started a new business	☐	☐	☐	☐
31 Purchased or built a home	☐	☐	☐	☐
32 A member purchased a car or other major item	☐	☐		
33 Increasing financial debts due to over use of credit cards	☐	☐		
34 Increased strain on family "money" for medical dental expenses	☐	☐		
35 Increased strain on family "money" for food, clothing, energy, home care	☐	☐		
36 Increased strain on family "money" for children's education	☐	☐		
37 Delay in receiving child support or alimony payments	☐	☐		
V WORK-FAMILY TRANSITIONS AND STRAINS				
38 A member changed to a new job/career	☐	☐	☐	☐
39 A member lost or quit a job	☐	☐	☐	☐
40 A member retired from work	☐	☐	☐	☐
41 A member started or returned to work	☐	☐	☐	☐
42 A member stopped working for extended period (e.g., laid off, leave of absence, strike)	☐	☐		
43 Decrease in satisfaction with job/career	☐	☐		
44 A member had increased difficulty with people at work	☐	☐		
45 A member was promoted at work or given more responsibilities	☐	☐		
46 Family moved to a new home apartment	☐	☐		
47 A child adolescent member changed to a new school	☐	☐		

FAMILY LIFE CHANGES	DID THE CHANGE HAPPEN IN YOUR FAMILY? During Last 12 Months Yes	No	Before Last 12 Months Yes	No
VI. ILLNESS AND FAMILY "CARE" STRAINS				
48 Parent/spouse became seriously ill or injured	☐	☐	☐	☐
49 Child became seriously ill or injured	☐	☐	☐	☐
50. Close relative or friend of the family became seriously ill	☐	☐	☐	☐
51 A member became physically disabled or chronically ill				
52. Increased difficulty in managing a chronically ill or disabled member				
53 Member or close relative was committed to an institution or nursing home				
54 Increased responsibility to provide direct care or financial help to husband's and/or wife's parent(s)	☐			
55. Experienced difficulty in arranging for satisfactory child care				
VII LOSSES				
56 A parent/spouse died				
57 A child member died	☐	☐		
58 Death of husband's or wife's parent or close relative				
59 Close friend of the family died				
60 Married son or daughter was separated or divorced	☐	☐		
61 A member "broke up" a relationship with a close friend	☐	☐		
VIII. TRANSITIONS "IN AND OUT"				
62. A member was married		☐		
63. Young adult member left home	☐	☐		
64 A young adult member began college (or post high school training)	☐	☐		
65 A member moved back home or a new person moved into the household	☐	☐		
66 A parent/spouse started school (or training program) after being away from school for a long time	☐	☐		
IX. FAMILY LEGAL VIOLATIONS				
67 A member went to jail or juvenile detention	☐	☐	☐	☐
68. A member was picked up by police or arrested	☐	☐	☐	☐
69 Physical or sexual abuse or violence in the home	☐	☐	☐	☐
70 A member ran away from home	☐	☐	☐	☐
71 A member dropped out of school or was suspended from school	☐	☐		

University of Minnesota
Family Social Science
290 McNeal Hall
St. Paul, Minnesota 55108

Family Health Program
FORM A
1981
H. McCubbin

F-COPES

FAMILY CRISIS ORIENTED PERSONAL SCALES

Hamilton I. McCubbin David H. Olson Andrea S. Larsen

PURPOSE

The Family Crisis Oriented Personal Evaluation Scales is designed to record effective problem-solving attitudes and behavior which families develop to respond to problems or difficulties.

DIRECTIONS

First, read the list of "Response Choices" one at a time.

Second, decide how well each statement describes your attitudes and behavior in response to problems or difficulties. If the statement describes your response very well, then circle the number 5 indicating that you STRONGLY AGREE; if the statement does not describe your response at all, then circle the number 1 indicating that you STRONGLY DISAGREE; if the statement describes your response to some degree, then select a number 2, 3, or 4 to indicate how much you agree or disagree with the statement about your response.

WHEN WE FACE PROBLEMS OR DIFFICULTIES IN OUR FAMILY, WE RESPOND BY:	Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
1 Sharing our difficulties with relatives	1	2	3	4	5
2 Seeking encouragement and support from friends	1	2	3	4	5
3 Knowing we have the power to solve major problems	1	2	3	4	5
4 Seeking information and advice from persons in other families who have faced the same or similar problems	1	2	3	4	5
5 Seeking advice from relatives (grandparents, etc.)	1	2	3	4	5
6 Seeking assistance from community agencies and programs designed to help families in our situation	1	2	3	4	5
7 Knowing that we have the strength within our own family to solve our problems	1	2	3	4	5
8 Receiving gifts and favors from neighbors (e.g. food, taking in mail, etc.)	1	2	3	4	5
9 Seeking information and advice from the family doctor	1	2	3	4	5
10 Asking neighbors for favors and assistance	1	2	3	4	5

WHEN WE FACE PROBLEMS OR DIFFICULTIES IN OUR FAMILY, WE RESPOND BY:	Strongly Disagree	Moderately Disagree	Neither Agree Nor Disagree	Moderately Agree	Strongly Agree
11 Facing the problems "head-on" and trying to get solution right away	1	2	3	4	5
12 Watching television	1	2	3	4	5
13 Showing that we are strong	1	2	3	4	5
14 Attending church services	1	2	3	4	5
15 Accepting stressful events as a fact of life	1	2	3	4	5
16 Sharing concerns with close friends	1	2	3	4	5
17 Knowing luck plays a big part in how well we are able to solve family problems	1	2	3	4	5
18 Exercising with friends to stay fit and reduce tension	1	2	3	4	5
19 Accepting that difficulties occur unexpectedly	1	2	3	4	5
20 Doing things with relatives (get-togethers, dinners, etc.)	1	2	3	4	5
21 Seeking professional counseling and help for family difficulties	1	2	3	4	5
22 Believing we can handle our own problems	1	2	3	4	5
23 Participating in church activities	1	2	3	4	5
24 Defining the family problem in a more positive way so that we do not become too discouraged	1	2	3	4	5
25 Asking relatives how they feel about problems we face	1	2	3	4	5
26 Feeling that no matter what we do to prepare, we will have difficulty handling problems	1	2	3	4	5
27 Seeking advice from a minister	1	2	3	4	5
28 Believing if we wait long enough, the problem will go away	1	2	3	4	5
29 Sharing problems with neighbors	1	2	3	4	5
30 Having faith in God	1	2	3	4	5

APPENDIX G

UNIVERSITY OF MINNESOTA
TWIN CITIES

Family Stress and Coping Project
Department of Family Social Science
275 McNeal Hall
St. Paul, Minnesota 55108
(612) 376-8135

February 19, 1985

Ms. Peggy Lock
Box 47
Site 15
RR 5
Edmonton, Alberta
CANADA T5P 4B7

Dear Ms. Lock:

I am pleased to give you permission to use F-COPES -- Family Crisis Oriented Personal Scales and FILE -- Family Inventory of Life Events and Changes in your study on families that have children with behavioral problems.

I have included a copy of the scoring manual as well as some additional reprints. Also, I have enclosed an order form. You may order these instruments directly from the Family Stress Project or, if you prefer, you may reproduce them yourself.

If I can be of any further assistance, please feel free to write or call.

Sincerely,

Hamilton I. McCubbin
Professor

HIM:sr-j
encl.

APPENDIX H

UNIVERSITY ASSOCIATES IN PSYCHIATRY, INC.

1 South Prospect St.
Burlington, VT 05401

Administrative Office
(802) 656-3270

Ambulatory Clinics
(802) 656-4560

Behavioral Medicine
and
Consultation Service
Hospital (802) 656-3270
Outpatient (802) 656-4560

Center for Children, Youth
and Families
(802) 656-4563

Central Vermont Division
(802) 229-0303

Crisis Services of
Chittenden County
(802) 656-3587

Forensic Service
Adult (802) 656-3270
Child (802) 656-4563

Inpatient Admissions
(802) 656-3937

Neurosciences Research Unit
(802) 656-3270

May 30, 1986

Mrs. Margaret E. Locke
Box 47 Site 15 RR5
Edmonton, Alberta
Canada T5P 4B7

Dear Mrs. Locke:

This is to certify that I have given you permission to use Child Behavior Checklist materials purchased from University Associates in Psychiatry in your thesis research.

I am enclosing information on the current status of these materials for appropriate citation.

Sincerely yours,

Thomas M. Achenbahch Ph.D.
Professor & Director
Center for Children, Youth,
& Families

TMA:je

Enc.