



RETURNING MATERIALS:

Place in book drop to
remove this checkout from
your record. FINES will
be charged if book is
returned after the date
stamped below.

--	--	--

THE PERCEIVED HEALTH NEEDS, HEALTH ASSISTANCE,
AND PROVIDERS OF HEALTH ASSISTANCE
CONCERNING AGED PARENTS
AS REPORTED BY THEIR ADULT CHILDREN

By

Barbara Jepson-Taylor

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

MASTER OF SCIENCE
IN NURSING

College of Nursing

1984

Copyright by
Barbara Jepson-Taylor
© 1984

ABSTRACT

THE PERCEIVED HEALTH NEEDS, HEALTH ASSISTANCE,
AND PROVIDERS OF HEALTH ASSISTANCE CONCERNING
AGED PARENTS AS REPORTED BY THEIR ADULT CHILDREN

By

Barbara Jepson-Taylor

A descriptive, exploratory study was conducted to gain an understanding about the perceptions of adult children regarding their parents' health needs, whether or not health assistance was expected, and who would be likely to provide health assistance as their parents grow older. Although there is much evidence to substantiate health needs of aged persons, how their families perceive the health needs of older members has received minimal attention in the literature. Martha Rogers' conceptual system was used as the theoretical basis from which nursing implications were derived for the understanding of study variables.

Descriptive data were collected by means of a self-administered questionnaire mailed to 47 adult children ($\bar{X}$ age = 43 years) with parents who were non-institutionalized, over age 65, and retired.

Nearly 85% of the respondents expected their parents to experience physical and psychological health needs and nearly 50% were neutral about their parents' socioeconomic health needs. No help/no helper needed was mentioned for nearly half their parents' health needs; for the remaining health needs, providers of health assistance within primary and secondary groups were expected to help. Males tended to have higher scores on six out of eight scales. The professional nurse was expected to help with few health needs; physical health needs were mentioned most frequently.

In conclusion, study findings suggest that adult children perceive a traditional role for the nurse as a provider of health assistance to their parents. Nurses must focus on directing helping behaviors that maximize health of both adult children and their parents.

To my husband, Bob,
and to our sons,
Scott and Andrew

ACKNOWLEDGMENTS

I would like to thank my Committee members, Barbara Given, Barbara Ames, Brigid Warren, Rita Gallin, and JoAnn Westrick, for their contributions to this study. I am grateful for their expertise, support, and guidance.

I am grateful to my nursing peers and friends for taking time out of their busy lives to help me with data collection. Special thanks to Sue Haviland and Carol Garlinghouse for their support and to Carol for the use of her instrument. The assistance of Bryan Coyle and Robb Hymes in analyzing the data was much appreciated. I am grateful to Peri-Anne Warstler whose typing skills enabled me to meet my deadlines.

Very special thanks to my husband, Bob, who provided love and encouragement throughout my graduate studies. Thanks to my children, Scott and Andrew, for their help and understanding during my many absences. I would also acknowledge the presence and guidance of God's Holy Spirit in my life (Proverbs 3:6) and especially throughout the writing of this manuscript (Phillipians 4:13, I Corinthians 10:31).

TABLE OF CONTENTS

Chapter	Page
LIST OF TABLES	xi
LIST OF FIGURES	xiv
I. THE PROBLEM	1
Introduction.	1
Purpose	8
Statement of Research Questions	9
Conceptual Definitions.	10
Adult Children.	10
Aged Parent(s).	11
Extended Family System.	11
Perceived Health Needs of Aged Parent(s)	12
Perceived Expectations of Health Assistance.	14
Perceived Providers of Health Assistance.	15
Assumptions	16
Limitations of the Study.	17
Overview of the Chapters.	19
II. CONCEPTUAL FRAMEWORK	21
Introduction.	21
Unitary Man	22
Application of Rogers' Conceptual System to the Study Variables	27
III. LITERATURE REVIEW	34
Introduction.	34
Perceived Health Needs of Aged Parents	34

Chapter	Page
"Health" as a variable modifying intergenerational relationships	34
Health needs of aged parents.	38
Physical health needs	41
Psychological health needs.	42
Socioeconomic health needs.	44
Perceived Health Assistance for Aged Parents.	46
The filial relationship	46
Additional characteristics of assistance	53
Perceived Providers of Health Assistance.	55
Summary	63
IV. METHODOLOGY.	65
Overview.	65
Sample.	66
Data Collection Procedure	67
Methodology	68
Instrumentation	71
Development of the instrument	71
Pretest of the study instrument	76
Reliability and validity.	77
Operationalization of Study Variables	78
Perceived health needs (total)	78
Perceived health assistance (total)	81
Perceived providers of health assistance.	82
Descriptive variables concerning the adult child and aged parents.	84
Procedures for Data Analysis.	84
Protection of Human Rights.	87
Summary	87

Chapter	Page
V. DATA PRESENTATION AND ANALYSIS.	89
Overview.	89
Descriptive Findings of the Study	
Sample.	90
Variables concerning the adult	
child participant	90
Demographic variables	90
Other descriptive variables	94
Variables concerning the aged	
parent(s) of the adult child	
participant	97
Demographic variables	97
Other descriptive variables	100
Additional Findings Regarding the Study Sample.	103
Summary	110
Data Presentation for Research	
Questions	111
Statistical technique for	
analyzing data.	111
Research Sub-question 1	112
Research Sub-question 2	119
Research Sub-question 3	126
Statistical technique for	
analyzing perceived providers	
of health assistance.	126
Results of perceived providers of	
health assistance	136
Perceived providers of health	
assistance for physical health	
needs	136
Perceived providers of health	
assistance for psychological	
health needs.	139
Perceived providers of health	
assistance for socioeconomic	
health needs.	141
Perceived providers of health	
assistance for total health needs	144

Chapter	Page
Additional findings: written comments from adult child participants.	145
Major research question	146
Reliability of the Questionnaire.	149
Summary	151
VI. SUMMARY AND IMPLICATIONS	157
Overview.	157
Descriptors of the Study Sample	157
Age. Sex of the participant. Marital status. Number of offspring	157
Race or ethnic background	159
Education. Occupation. Income level	159
Sibling rank in family of origin.	160
Health of adult child participant and their household members	161
Number of living parents. Age of parents.	163
Geographic distance from parents	165
Usual type and frequency of contact	166
Difficulty of parents living on their present income.	167
Parents' health	168
Additional Findings Regarding the Study Sample.	169
Age	170
Sex	172
Education	173
Income level	174
Geographic distance from parents.	175
Summary of additional findings regarding the study sample.	177

Chapter	Page
Research Questions.	178
Research Sub-Question 1	178
Perceived physical health needs	178
Perceived psychological health needs.	181
Perceived socioeconomic health needs.	183
Perceived health needs (total)	185
Research Sub-question 2	186
Perceived health assistance for physical health needs	186
Perceived health assistance for psychological health needs	187
Perceived health assistance for socioeconomic health needs	189
Perceived health assistance (total)	191
Research Sub-question 3	193
Perceived providers of health assistance for physical health needs	193
Perceived providers of health assistance for psychological health needs.	194
Perceived providers for socio- economic health needs	199
Perceived providers of health assistance for total health needs	202
Additional Findings: Summary of Written Comments.	205
Reliability and Validity of the Scales.	206
Major Research Question	215
Additional Limitations of the Study	217

Chapter	Page
Implications for Nursing Practice	218
Principle of Resonancy.	219
Principle of Helicy	222
Principle of Complementarity.	226
Implications for Nursing Education.	231
Implications for Nursing Research	235
Summary	238
APPENDICES	
APPENDIX A	239
Letter of Explanation	240
APPENDIX B	242
Co-Signed Letter of Explanation to Study Participants	243
APPENDIX C.	244
Letter of Explanation	245
Consent Form.	246
Study Questionnaire	247
REFERENCES.	262

LIST OF TABLES

Table		Page
1	Items Pertaining to Physical, Psychological, and Socioeconomic Health Needs and the Manner Adapted from the Scales Used by Garlinghouse (1982).	72
2	Sociodemographic and Other Descriptive Variables Used to Describe Adult Children and Their Parents.	85
3	Demographic Variables Concerning the Adult Child Respondent (age, sex, marital status, racial or ethnic background, education, occupation, in- come level) (<u>N</u> =47)	91
4	Descriptive Variables Concerning thw Adult Child Respondent (difficulty living on present income, sibling rank in family of origin) (<u>N</u> =47).	95
5	Descriptive Variables Concerning the Health of the Adult Child Respondents (<u>N</u> =47) and Household Members (description of health, presence of chronic health problems, and health problems experienced).	96
6	Demographic Variables Concerning the Parents of Adult Children (<u>N</u> =47) (number of living parents, age of	

Table		Page
6	parents, estimated number of miles from parents)	99
7	Descriptive Variables Concerning the Parents (<u>N</u> =74) of Adult Children (parents' difficulty living on income, usual type and frequency of contact with parents)	101
8	Descriptive Variables Concerning Health of Parents (<u>N</u> =74) of Adult Children (description of health, pres- ence of chronic health problems, and health problems experienced by parents).	102
9	Correlation Matrix: Relationship Between Selected Sociodemographic Variables Concerning the Adult Child Respondent and Each Scale Utilized in the Present Study	105
10	Summary of Statistically Significant Correlations Between Selected Socio- demographic Variables Concerning the Adult Child Respondent and Each Scale Utilized in the Present Study	106
11	Percent and Number of Adult Children Who Identified Physical, Psychological, and Socioeconomic Health Needs of Their Parents (in descending order) (<u>N</u> =47).	113
12	Sample Means and Standard Deviations for Scales Used to Measure Perceived Health Needs of Aged Parents (<u>N</u> =47)	118

Table		Page
13	Percent and Number of Adult Children Who Identified Health Assistance for Physical, Psychological, and Socioeconomic Health Needs of Their Parents (in descending order) (<u>N</u> =47). . . .	120
14	Sample Means and Standard Deviation for Scales Used to Measure Perceived Health Assistance for Physical, Psycho- logical, and Socioeconomic Health Needs of Aged Parents by Their Adult Children (<u>N</u> =47).	125
15	Percent and Number of Adult Children Who Indicated a Category of Provider of Health Assistance for Health Needs of Their Parents (<u>N</u> =47)	128
16	Mean Proportion (Percent) of Perceived Providers of Health Assistance Men- tioned by Adult Children Within Each Health Need Scale	135
17	Summary of Reliabilities of Each Scale Using Coefficient Alpha	150
18	Correlation Matrix: Intercorrela- tions of Scales Utilized in the Present Study	152
19	Factor Matrix of Health Need Items Within Each Scale	153
20	Intercorrelation Matrix of Factors Within Each Scale Utilized in Present Study	208
21	Coefficient Alphas of Factors Within Each Scale Utilized in the Present Study. .	208

LIST OF FIGURES

Figure		Page
1	Application of Roger's Conceptual System to Health Issues of Aged Parents	28
2	Nursing Assessment of the Adult Child/Environment	227

CHAPTER I

THE PROBLEM

Introduction

Adulthood has existed as a separate developmental stage, apart from infancy, since the beginning of human life. Only after the Industrial Revolution, however, were additional stages of human adult life to include adolescence, young adulthood, middle adulthood, and late adulthood. Until recently, "middle age" has been regarded as a somewhat uneventful plateau in life (Davis, 1981). Nevertheless, research on "middle age" as a stage in human development is growing due to increased longevity and a decreasing proportion of adult time being spent in active parenthood (Borland, 1978).

Data from longitudinal studies suggest that specific events are associated with middle adulthood (Levinson, 1978; Medinger, 1981; Palmore, 1979; Rossi, 1980). The middle-aged adult is involved with implementing earlier choices of life style, occupational mode and family life which are evident by a variety of roles (Stevenson, 1977). Over thirty years ago, Havighurst (1954) noted that the last

devel

paren

plac

membe

Ward,

aged

aging

the p

T

membe

five-

Shana

famil

65 in

of fo

ceiva

roles

parti

paren

paren

is th

Cares

What

T

tion

power

developmental task of "middle age" is adjusting to aged parents. Recent historical changes in this century are placing new demands on families who care for their older members (Rosenmayer, 1977; Streib, 1976; Treas, 1979; Ward, 1978). Both middle-aged adult children and their aged parent(s) are caught in a "demographic bind:" more aging parents and fewer offspring to share the care of the parent(s) as the parent(s) grow older.

The contemporary middle-aged adult is probably a member of a four-generation family, although the number of five-generation families is increasing (Neugarten, 1979; Shanas, 1980). Earlier in this century four-generation families were uncommon; today half of all persons over age 65 in the United States with living children are members of four-generation families (Shanas, 1980). Thus, it is conceivable that the middle-aged adult assumes interlocking roles (Shanas, 1980; Stevenson, 1977; Treas, 1977) within a particular family unit. These roles may include that of parent, grandparent, and possibly "adult child" to aging parent(s). These roles give rise to new questions: Who is the elder of the family? Who is the adult child? Who cares for whom? For how long? Under what circumstances? What care is needed?

Transformations in the social and economic organization of our society, however, have decreased aging parent(s)' power to insure their support by adult children (Dowd, 1980).

Wit

fin

vic

ro

ha

pe

tu

ar

Wa

re

cl

pa

to

as

an

ho

pa

ch

be

lg

ge

of

ha

lg

et

With the advent of social security, aged persons are more financially independent from their adult children than previous cohorts of older persons. Changes in women's social roles, particularly the rise in work outside the home, have fostered competing obligations toward care of aged persons (Brody, 1981). Due to better educational opportunities and improved economic status, middle-aged persons are less financially dependent on their parents. Hess and Waring (1978), after a review of demographic trends and research literature on intergenerational relations, conclude that the relationship between adult child and aging parent is in transition from one based on obligation due to economic interdependence to one that is voluntarily assumed and based on emotional ties.

Eighty percent of aged persons have living children, and of these adult children 75% live either in the same household or within thirty minutes distance from their parents (Olsen, 1980). The number of surviving adult children does not reveal the quality of the relationship between adult child and aged parent(s), however (Neugarten, 1979; Shanas, 1980). Though separate living arrangements generally are the rule, continuing contacts and exchange of mutual services within families with older members have been documented (Jonas, 1980; Seelbach, 1978; Shanas, 1979; Spark and Brody, 1965; Sussman, 1974). Silverman et al. (1977) point out that the multigenerational family

is maintained not by spatial proximity but through dependence and psychological ties. Troll (1980) suggests that families tend to react to the aging of their members in terms of their shared family theme or value system.

Families in general behave responsibly in helping elderly persons (Kent, 1972; Neugarten, 1979; Shanas, 1979; Spark and Brody, 1965). The parents of middle-aged adults may be independent throughout most of their children's middle years. There may be minimal evidence of change in the relationship between the two generations. According to Stevenson (1977), more often there is a gradual transition in the relationship, with the middle adult showing more concern for the welfare of the older parent. Most aged persons want to be independent but when they can no longer manage, they expect their children, who are usually in their middle years, to come to their aid (Brody, 1981; Lopata, 1978; Neugarten, 1979). This expectation is notably apparent in times of illness of the parent (Brody, 1978; Sussman, 1974). Often an event such as retirement, death of a parent, or the onset of chronic illness, signals to the adult child that his parent(s) are growing older (Peterson, 1979; Shanas, 1980). The middle adult begins to think about the future and responsibilities that may be upcoming toward the older family member. Blenkner (1965) coined the term "filial maturity" to indicate the adult child's capacity to be "depended on" by his/her elderly parent(s).

pare

his

ind

per

the

a s

chi

pat

mem

olo

and

ev

fa

pa

ad

pa

pa

co

ti

ti

ti

ti

ti

ti

ti

From an ecological perspective, "perception of aged parents" is a function of the adult child's interaction with his/her environment or extended family system. Interaction indicates a relationship of reciprocal influence between a person and his/her environment. Environment, specifically the extended family system including aging parent(s), has a subjective reality to the extent and manner the adult child perceives it (Bubolz et al., 1979). Interaction patterns and organizational levels of families with older members are key factors explaining which families with older members recover from major problems such as illness and which families do not (Streib, 1976). Considerable evidence suggests that health of the parent is a significant factor in the affective quality of the adult child/aged parent relationship (Johnson and Bursk, 1977).

Thus, within the context of an extended family system adult children can act to enhance successful aging of the parent(s) (Shanas, 1977) or they can act to accelerate the process (Johnson and Bursk, 1977; Sussman, 1974), depending on the adult child's perceptions of the aging process of the parent(s). Although "adjusting to aged parents" is presumed to be an expected task of the middle-aged adult, care of aged parent(s) is complicated by the lack of societal modes or cultural norms that guide the adult child filial responsibilities (Johnson and Bursk, 1977; Roscow, 1976; Seelbach, 1978; Treas, 1977). The dependencies

of older family members tend to be continuing, progressive in some cases, and at times sporadic or untimely (Litman, 1974; Streib, 1976). Needs of elderly persons may arise as emotional chain-reactions from the loss of certain abilities and social positions (Rosenmayer, 1977; Simos, 1973). What is "special" about needs of older persons is often the intensity of the need coupled with limitations imposed by the aging process (Silverstone, 1979).

Families with older members frequently enter a health care setting after the older member has become acutely and/or chronically ill (Egerman, 1966). In the investigator's professional nursing practice, it has been observed that middle-aged adult children often provide various ongoing helping activities for the benefit of their parent(s) health and sincerely desire to continue to do so. Too often, however, they express ambivalent feelings toward their parent(s), i.e., a sense of love or duty to "help" vs. frustration and anxiety about their parent(s) response to their "help."

In addition, present reimbursement mechanisms for health care limit services available to families with older members who are basically in good health but in need of intermittent help to remain functionally independent (Brody et al., 1978; Sussman et al., 1979). Brody et al. (1978) note that the bulk of home health services for the elderly and chronically ill are provided by family members. Their

data

unit

inst

sys

who

inte

inst

main

hidd

the s

those

H

(Arch

netwo

on an

1978)

child

the a

Thurn

often

their

middl

probl

tions:

as the

1979,

data confirm that the presence/absence of a family caring unit is an important predictor in delaying, if not preventing, institutionalization of elderly persons. The health care system offers little guidance or preparation to families who desire to care for their older members except for intermittent home care for medical problems and expensive institutionalization. In addition, the "true costs" of maintaining elderly persons in their homes have been largely hidden because the greatest portion of such costs represent the services provided by family and friends rather than those provided at public expense (Pegals, 1980).

Health care professionals may not be aware of the role (Archbold, 1982) that the adult child plays in the helping network (Streib, 1972) of the older persons whom they see on an irregular basis or one-time-only visit (Johnson, 1978). Often "unrealistic help" is expected from the adult child regarding the amount, type, and duration of care to the aged parent(s) (Hess and Waring, 1978; Robinson and Thurnher, 1979; Ward, 1978). Silverstone (1982) points out often sons or daughters of older persons may overestimate their own roles in their parents' lives. Typically, the middle-aged adult is confronted with a complex set of problems: little preparation for changing family relationships resulting from untimely needs of their parent(s) as they grow older (Johnson and Catalano, 1981; Silverstone, 1979; Smith, 1979), a desire to exercise filial responsibility

(See)

skill

perio

if cu

singl

will

F

healt.

Nursin

whole:

with h

gratic

adult

compor

interv

percep

contin

A

needs

needs

the li

likely

need f

childr

(Seelbach, 1978; Simos, 1973), and a lack of resources, skill, or support to provide care especially over a period of years (Streib, 1972). Brody (1973) warns that if current disease-oriented approaches continue as the single approach to health, then the needs of the elderly will be unmet.

From a nursing perspective the family as a unit of health care has been introduced within nursing frameworks. Nursing practice is rooted in a fundamental concept of wholeness of life (Rogers, 1970) and is therefore concerned with helping networks available to older persons. Integration of the family with older members, including the adult child/aged parent(s) relationship, into the practical component of nursing depends on accurate assessment and interventions based on an understanding of the adult child's perception of filial responsibilities if he/she is to continue to provide care to his/her aged parent(s).

Purpose

Although there is much evidence to substantiate health needs of aged persons, how their families perceive the health needs of older members has received minimal attention in the literature (Olsen, 1980). Since adult children are likely to be caregivers to their aged parents, there is a need for a descriptive study to examine perceptions of adult children regarding health issues concerning their parents

as

cr

fa

is

re

as

fr

gr

ad

ma

ve

pa

re

of

re

gi

co

re

as their parents grow older. This research study is a descriptive, exploratory study of one member of the extended family system, the adult child. The purpose of this study is to collect data about the perceptions of adult children regarding their parents' health needs, whether or not health assistance will be expected, and who would be likely to provide health assistance to their parents as their parents grow older. Increased understanding of the perceptions of adult children will assist health care professionals to make knowledgeable assessments and plan appropriate interventions for adult children who desire to care for their parents as their parents grow older.

Statement of the Research Questions

The goal of this study is to measure perceived health needs, perceived health assistance, and perceived providers of health assistance in a group of adult children. The results will be analyzed to answer the major research question: How do adult children perceive health issues concerning their parents as their parents grow older? The sub-questions asked about health issues are:

1. What are the physical, psychological, and socio-economic health needs of aged parents as perceived by their adult children?
2. What are the expectations of health assistance for aged parents as perceived by their adult children?

Adul-

T

a str

inter

(Beng

older

in th

(1977

in th

patic

and i

ing t

appro

into

middl

to as

of th

perso

cence

since

the o

3. Who is likely to provide health assistance to aged parents as perceived by their adult children?

Conceptual Definitions

Adult Children

The term "adult children" generally is referred to in a structural sense as the "middle persons" in studies of intergenerational relationships and/or lineage studies (Bengston, 1979) and in studies of support networks to older persons. Developmentally, adult children are usually in the "middle years" of the human life cycle. Stevenson (1977) refers to middlecence or middle years as the stage in the human life cycle when the adult life-style, the occupational mode, and the family life pattern have been chosen and individuals are involved in settling down to implementing their earlier choices. The forty year period, spanning approximately age thirty to age seventy, is further divided into two segments: Middlecence I, called the core or the middle years (30 to 50 years) and Middlecence II referred to as the new middle years (50 to 70 years). For purposes of this study, adult children are conceptually defined as persons in middlecence. Since the notion of Middlecence I and II is not generally recognized by society and since society generally considers retirement to reflect the onset of "being old" (Shanas, 1980), adult children

are

age

Age

deat

age-

typ:

cept

(Sta

of a

one

pare

noni

part

Exte

I

ment

from

(198

most

of in

or ad

those

are defined in this study as persons 30 to 64 years of age who have one or more aged parent(s).

Aged Parent(s)

According to Stevenson (1977) the years between 70 and death have been chosen as late adulthood. The chronologic age-span is arbitrary because the length of human life has typically shifted upward. Since our society generally accepts retirement and/or age 65 as "entry" into old age (Shanas, 1980), aged parent(s) are defined as parent(s) of adult children where: one or both parent(s) are living, one or both parent(s) are age 65 years or older, one or both parent(s) are retired, and one or both parent(s) live in a noninstitutional setting and apart from the adult child participant in this study.

Extended Family System

Duvall (1971) defines the final stage of family development as the "Aging Family," a stage that spans the period from retirement to death of one or both spouses. Shanas (1980) distinguishes between family and household. For most older people, the "family" is defined as that group of individuals to whom they are related by blood, marriage or adoption; in contrast to the term "household" meaning those persons living under the same roof. Troll (1980)

pre

st

so

li

by

ap

th

an

fa

pr

is

bu

as

co

of

pr

re

pe

pe

pe

pe

pe

pe

pe

pe

pe

pe

prefers the term "families in later life" to connote family status where there are post-childbearing parents. Stevenson (1977) suggests that the final stage of the family life cycle is the "actualizing family" and it is marked by 40 to 60 or more years of cohabitation. Stevenson's approach to the stages of the family life cycle focuses on the accomplishment of developmental tasks of both children and parents as a somewhat joint process. In this way, familial relationships can be enhanced through the growth process (vs. isolation and deterioration of the family).

For purposes of this study, an extended family system is conceptualized to be an "actualizing family" and includes, but is not limited to, the adult child and aged parent(s) as previously defined. The extended family system is considered to be the context within which health needs of aged parent(s), expectations of health assistance, and providers of health assistance for aged parent(s) are perceived by adult children.

Perceived Health Needs of Aged Parent(s)

Health is defined as dynamic life experiences of a human being and implies continuous adjustment to stressors in the internal and external environment through optimum use of one's resources to achieve maximum potential for daily living (King, 1981). Perception may be conceptually defined as an individual's representation or image of

real

1961

fund

at a

prev

selv

out

tens

agin

is s

asso

and

of a

ceiv

be e

must

maxi

Heal

futu

stat

2

chang

circu

pects

reality, awareness of objects, persons, and events (King, 1981). According to King (1981) human beings have three fundamental health needs: (1) useable health information at a time when they require it and are able to use it, (2) preventive care, and (3) care when they cannot help themselves (p. 8). Johnson (1982) and other researchers point out that the needs of older persons often vary with the intensity of the need coupled with limitations imposed by the aging process. The aging process itself is a concept that is somewhat ambiguous, since its rate and the experiences associated with it vary with individuals (Barrowclough and Pinel, 1981).

For purposes of this study, perceived health needs of aged parent(s) are defined as those health needs perceived by the adult child as specific requirements that may be experienced by their parent(s) as aging progresses and must be met if the parent(s) are to function at their maximum physical, psychological, and socioeconomic potential. Health needs are those which occur at some time in the future and are not intended to reflect the present health status of older parent(s).

1. Perceived physical health needs are defined as future changes in locomotion, nutrition, aeration, elimination, circulation, sensation, and rest that the adult child expects his/her parent(s) to experience as they grow older.

2
as f
rela
abili
adul
they

futu
ing,
role
expe

Perc

for
thes
proc
perf
envi
for
psyc
of t
exte
will
grow

2. Perceived psychological health needs are defined as future changes in individual roles, intimacy, family relationships, self-esteem, memory, desire to reminisce, ability to learn, and problem-solving ability that the adult child expects his/her parent(s) to experience as they grow older.

3. Perceived socioeconomic health needs are defined as future changes in ability to afford food, housing, clothing, utilities, health care, social activities, and social roles that the adult child expects his/her parent(s) to experience as they grow older.

Perceived Expectations of Health Assistance

Aged persons may require health assistance not only for their fundamental health needs (King, 1981), but for those needs imposed on them by limitations due to the aging process. Garlinghouse (1982) defines health assistance as performing, guiding, supporting, providing a developmental environment, and teaching self-care activities necessary for an individual to attain and maintain maximum physical, psychological, and socioeconomic function. For purposes of this study, expected health assistance refers to the extent to which the adult child perceives his/her parent(s) will need help with a specific health need as the parent(s) grow older.

Perce

eral

pers

be m

gene

teri

ence

are

as o

dis

acti

segr

pose

defi

like

nee

into

Grou

one

part

pare

Grou

dent

Perceived Providers of Health Assistance

Providers of health assistance refer to persons generally considered to be part of the helping networks of older persons (Litman, 1974; Lopata, 1978; Weeks, 1981) and may be members of either primary or secondary groups. In general, primary groups are defined as small groups characterized by face-to-face contacts with some degree of permanence such as family and friendship groups. Secondary groups are characterized by relations that are somewhat impersonal, as opposed to the personal relations of primary groups. The distinguishing feature of secondary relations is that interaction tends to be stereotyped, involving only specialized segments of the individual (Society Today, 1971). For purposes of this study, providers of health assistance are defined as those persons perceived by the adult child likely to help the aged parent(s) with a specific health need. Providers of health assistance are dichotomized into:

1. Providers of health assistance within the Primary Group who may be friends and/or neighbors of the parent(s), one of the brothers or sisters of the adult child participant, the adult child participant, the spouse of the parent(s), and/or relatives of the parent(s).
2. Providers of health assistance within the Secondary Group who may be a social worker, counselor, physician/dentist, professional nurse, or a community/government worker.

fol

Assumptions

For purposes of this study the investigator makes the following assumptions:

1. That the adult child is and continues to be a member of an extended family system that includes aging parents.
2. That as aged parents grow older, they will experience some health needs that require assistance.
3. That the relationship between the adult child and aged parent is regarded as one aspect of the helping network of aged parent(s) and is desirable for successful aging of the parent(s).
4. That responses to the questionnaire reflect honestly and accurately the individual's perceptions at that point in time.
5. That the interactions between adult child and aged parent are theoretically such that health needs, expectations of health assistance, and persons most likely to help are perceived by both the adult child and aged parent, but not necessarily in the same manner.
6. That care of aged parents is a filial task of most adult children.
7. That perceptions of adult children are influenced by multiple factors (such as values, past experience) within and outside of the extended family system.

Limitations of the Study

Limitations of the study include the following:

1. This study focuses on perceptions of adult children concerning future health issues that their parent(s) may or may not experience as they grow older. Actual health needs of their parent(s) as well as actual health assistance and providers of health assistance to their parent(s) are beyond the scope of this study.
2. The focus of this study will not be to describe how the aged parent(s) may influence perceptions of the adult child.
3. Expectations of health assistance from persons most likely to help are affected by various factors such as economic status, accessibility and availability of providers, past experiences, past relationships, and knowledge of resources. This study will not control for these variables and will not validate whether or not health assistance has been or will be obtained.
4. This study focuses on one adult child providing information on future health needs of his/her parent(s) and does not include perceptions of other persons as friends, siblings, or professionals.
5. No attempt was made to determine the structure of the relationship or quality of relationship between the

adult child and the aged parent(s) within the extended family system (i.e., biological child, step-child).

6. The adult children who agreed to participate in this study may be different from those who refused. Therefore, it is possible that the research findings are not representative of the total population of adult children with aged parent(s).

7. The research findings may not apply in the same way to various ethnic groups or to those persons who cannot read, write, or speak the English language.

8. In this study aged (one or both) parent(s) are 65 years, retired, and live independently from their adult children. Therefore, the research findings may not apply to adult children with aged parent(s) who live in an institutional setting or in the same household.

9. This study does not exclude adult children and aged parent(s) who have chronic disease; no attempt was made to validate medically the health status of either the adult child or aged parent(s).

10. The sample of adult children was voluntary rather than random. All persons who wished to participate and met the criteria were allowed to do so.

11. The questionnaire was administered by mail. Persons who respond to mailed questionnaires may have characteristics different from those who do not respond.

12. Since the questionnaire was mailed to the home of

Incl

stud

niti

of t

Rela

cont

indi

rese

In a

part

in C

scor

in ti

and g

Addit

1

the participant, neither the setting nor the circumstances under which the participant completed the questionnaire were controlled.

Overview of the Chapters

This research study is organized into six chapters. Included in Chapter I are an introduction, purpose of the study, statement of the research questions, conceptual definitions, and a statement of the assumptions and limitations of the study.

In Chapter II the conceptual framework is presented. Relationships among the concepts is considered within the context of nursing theory.

A review of the literature presented in Chapter III indicates pertinent background information relevant to the research questions and those variables which it addresses. In addition, literature is reviewed to support the use of the particular instrument and method utilized in this study.

Discussion of methodology and procedures are presented in Chapter VI. Data collection procedure, instruments, scoring procedures, and human rights precautions are included in this chapter.

The data collected relevant to the research questions and general descriptive data are presented in Chapter V. Additional findings are noted.

In Chapter VI research findings are summarized and

concl

for p

are d

conclusions and recommendations are presented. Implications for professional nursing practice, education, and research are discussed.

that

tion.

disc

part

will

a pa

be v

are

sea.

Mar

fra

int

son

the

sta

CHAPTER II

CONCEPTUAL FRAMEWORK

Introduction

In this chapter, a conceptual framework is presented that will provide the basis for examining the research questions and discussing the implications of study findings discussed in Chapter VI. The rationale for use of the particular framework in relation to the study variables will be explored. Although nursing interventions are not a part of the present study, the conceptual framework will be used as the basis from which nursing implications are derived for professional practice, education, and research.

The conceptual framework utilized in this study is Martha Rogers' theoretical basis for nursing. A conceptual framework or conceptual system is characterized by an interrelated set of postulates having some relevance for some central phenomenon. Out of this conceptual framework, theories emerge directed toward achieving further understanding of the real world (Rogers, 1970).

The concept of extended family system or families with

older members is well recognized in literature about families and intergenerational relations and in gerontological literature. Conceptually, the extended family system will not be discussed in these areas. Rather, Rogers' conceptual system provides a way to examine perceptions of adult children within the context of the family with aging members. The usefulness of Rogers' theory lies in its scope and its range of applicability to complex nursing problems. Central to Rogers' conceptual system is the construct of Unitary Man which provides a broad perspective of man/human-environment and the human organism's response to various life processes as life, health, illness, and aging (Rogers, 1980). In the following sections, the investigator will address basic assumptions about the nature of man/human organism and how these assumptions relate to Rogers' Principles of Homeodynamics. These assumptions and principles will be used to conceptually describe the variables in this study, that is, the perceptions of adult children within the context of the extended family system.

Unitary Man

Four basic concepts compose Rogers' conceptual system: energy fields, a universe of open systems, pattern and organization, and four dimensionality. A brief definition of each concept is necessary to relate the conceptual

system to nursing. According to Rogers (1982), energy fields constitute the fundamental unit of both the living and non-living. The term "field" is a unifying concept and energy signifies the dynamic nature of the field. There are two energy fields: the human energy field and the environmental field. In other words, the unitary human field is an energy field, it does not have an energy field. Unitary Man is defined as an irreducible, four dimensional energy field identified by pattern and organization and manifesting characteristics different from those of the parts and which cannot be predicted from knowledge of the parts. The human and environmental fields flow through each other, they are open. Pattern and organization identify energy fields and the nature of the pattern and organization change continuously and innovatively. Change proceeds by continuous repatterning of both human and environmental fields and reflects the mutual, simultaneous interaction between the two fields at any given point on a space-time continuum. Four dimensionality is conceptualized as a non-linear domain or a space-time matrix. A "point in time" is a dynamic phenomena in contrast to a static phenomena. A "point in time" is a four dimensional matrix (length, breadth, depth, time) and is the "relative present" or "infinite now" for any individual (man/human-interaction). To summarize, interaction between the human energy field and environmental energy field is such that

both a

taneous

sional

Th

and di

of Res

between

by "wa

change

wave p

Helicity

and di

direct

clinica

divers

experi

Patter

rhythm

the in

Althou

helicity

between

the no

mutual

change

1979, .

both are repatterned -- mutually, continuously, simultaneously, and with increasing complexity in a four dimensional time matrix along a space-time continuum.

The Principles of Homeodynamics postulate the nature and direction of unitary human development. The Principle of Resonancy refers to the nature of the change occurring between human and environmental fields. Both are identified by "wave pattern and organization" manifesting continuous change, accelerating and decelerating, from lower frequency wave patterns to higher frequency patterns. The Principle of Helicy postulates the direction of the change. The nature and direction of human and environmental change is unidirectional, continuously innovative, accelerating and declining, probablistic, and characterized by increasing diversity. Though there may be commonalities in life experiences and reactions, the exact situation never recurs. Pattern and organization manifest itself as "non-repeating rhythmicities." The Principle of Complementarity refers to the inseparability of the human and environmental fields. Although this principle is inherent in the principle of helicy, Rogers emphasizes the continuous, mutual process between human and environmental fields as a contradiction to the notion of causality. In a universe of open systems, mutuality is explicit -- human and environmental fields change together (Rogers, 1980; Rogers, 1982; Whelton, 1979).

According to Rogers (1980) the science of nursing studies the nature and direction of unitary human development which is integral with its environment. Hypotheses of predicted outcomes may be derived from the Principles of Homeodynamics for the development of nursing science (Whelton, 1979). These Principles provide direction to nursing practice and undergird the nursing process. The goal of nursing is human/environment interaction, to redirect and direct (re-pattern) for maximum health potential. Hence, nursing is a dynamic process, actively involved with human and environmental energy fields and is directed toward maximum health potential of both fields.

Five nursing concepts are derived from Rogers' basic assumptions about the nature of human beings: wholeness, openness, pattern and organization, unidirectionality, and sentience and thought. Whelton (1979) summarizes the meaning of these concepts:

1. Wholeness -- there exists an individual integrity, an individual physical and psychological uniqueness, that is the person.
2. Openness -- there is a constant interaction between the person and his/her environment. This exchange is ultimately affected by and affects all other interaction in the universe.
3. Pattern and organization -- as the person develops

he/she increases in complexity, his/her life-style and habits grow out of multiple previous human/environment interactions.

4. Unidirectionality -- events in a person's life are unique, they do not come again or repeat themselves.

5. Sentience and thought -- a person has the ability to understand his/her world and his/her experiences in the world (p. 7).

In summary, four concepts compose Rogers' conceptual system: energy fields (human and environmental), a universe of open systems, pattern and organization, and four dimensionality. These concepts are manifested as Unitary Man. The Principles of Homeodynamics postulate the nature and direction of unitary human development. The Principle of Resonancy refers to the nature of the change, the Principle of Helicy to the direction of the change, and the Principle of Complementarity to the inseparability of the human and environmental fields. Nursing seeks to study the nature of unitary human development integral with environment and is a dynamic process. In the next section the application of Rogers' concepts and principles to the study variables are discussed.

Application of Rogers' Conceptual System
to the Study Variables

The "extended family system," of which the adult child is a member, is conceptualized to be a "group field" (Rogers, 1982) as depicted by the boxes in Figure 1. Environment is defined as an irreducible, four dimensional energy field identified by pattern and organization, manifesting characteristics different from those of the parts, and encompassing all that outside any given human field. It follows that the adult child and aged parent(s) can be considered to be the "environment" to one another since each are members of the same group field, or extended family system. The interaction of this relationship is depicted inside the boxes in Figure 1. Repatterning of human-environment interactions within the context of the extended family system can be expected to occur as its members seek to accomplish developmental tasks associated with family and individual life cycles (which are necessary for maximum health potential). As the extended family system changes over time (and this change is not constant, but rather accelerates and declines), its members may have common life experiences and reactions but the exact situation never recurs. Simply stated, the extended family system is patterned and repatterned by multiple human-environment interactions that occur over time.

Rogers' five basic nursing concepts about the nature of

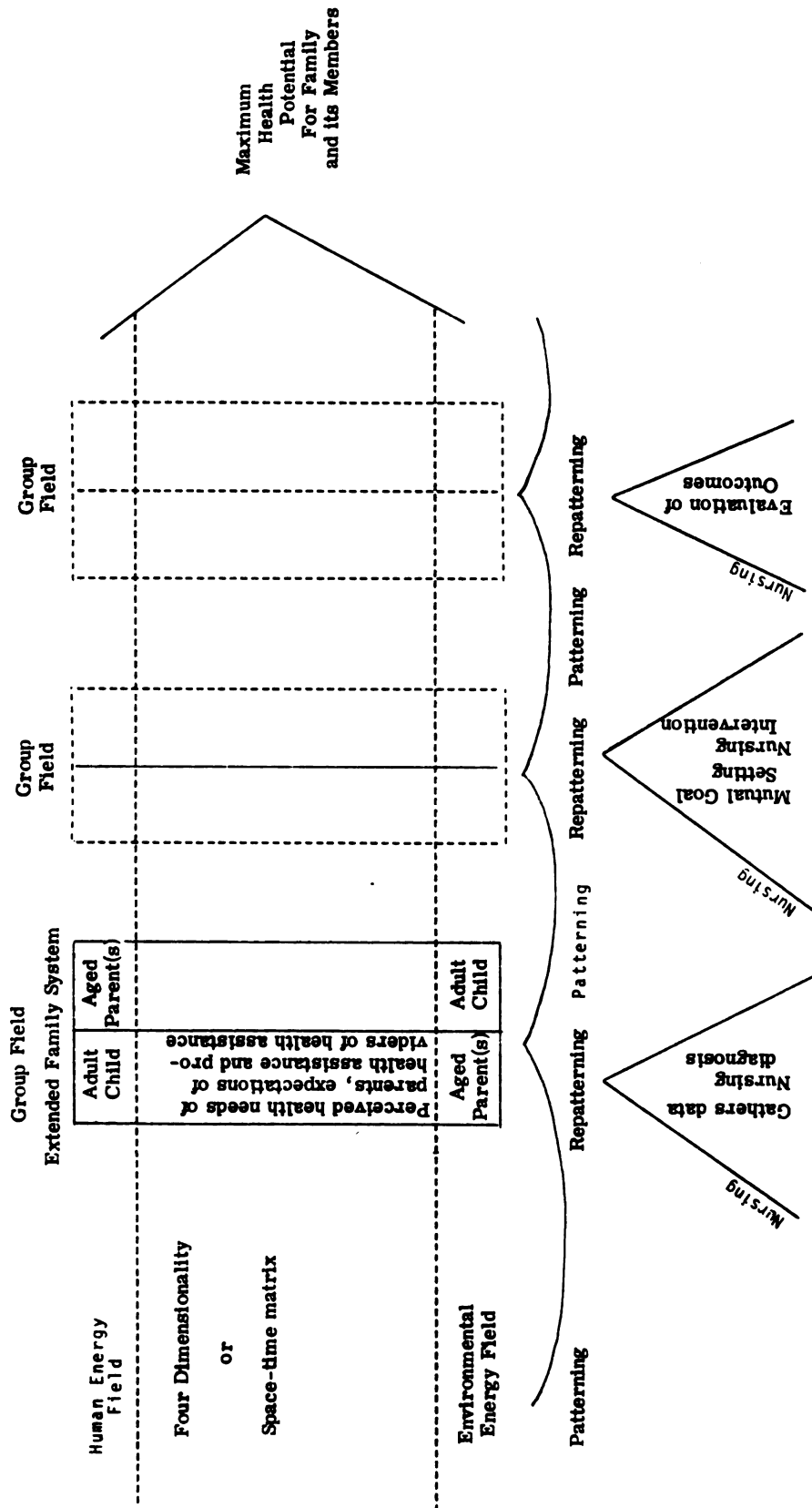


Figure 1. Application of Roger's Conceptual System to Health Issues of Aged Parents.

man c

The c

system

in Fi

with

paren

or de

unit

and c

fami

surna

inter

enco

side

Sent

Mem

and

adu

spa

ica

by

act

abo

Wit

ch

man can be applied to describe the extended family system. The concept of wholeness refers to the extended family system as a unit with members or "group field." The boxes in Figure 1 depict the extended family system as a unit with members which include the adult child and aged parent(s). The concept of openness refers to the extent or degree of interaction within or outside of the family unit and is indicated by broken lines in Figure 1. Pattern and organization refers to that which gives the extended family system identity (i.e., habits, family themes, and surnames) and is derived from multiple human/environment interactions over time. Unidirectionality refers to events encountered by the extended family system (within and outside of the family unit), events that are not repeatable. Sentience and thought refer to the capacity of family members to understand, to think, to experience each other, and to perceive each other. The relationship between the adult child and the aged parent(s) at any given point on a space-time continuum is irreversible, non-repeatable, rhythmic, and characterized by pattern and organization and by increasing complexity.

Since perceptions, judgment, mental actions, and reactions are not directly observable, inferences are made about these components of human behavior (King, 1981). Within the context of the extended family system, the adult child perceives health issues of his/her parent(s) in a

way that is familiar (patterning) and that has evolved over time (re-patterning). Based on Rogers' concepts of "rhythmicities" derived from the Principle of Helicy, change within the extended family evolves in sequential stages and increasing diversity. Re-patterning of the perceptions of the adult child can be expected to occur as the adult child seeks to accomplish developmental tasks associated with family and individual life cycles (e.g., filial responsibilities). In other words, perceptions of the adult child about the health needs, expectations of health assistance, and who would most likely help his/her aged parent(s) will be characterized by patterning and re-patterning within the context of the extended family system. That is, they can be identified and described by nursing professionals and will change over time.

Gathering data and deriving a nursing diagnosis are the first steps in the nursing process (Figure 1). The purpose of this study is to identify and describe perceptions of a group of adult children concerning health needs of their parents, health assistance required for these health needs and persons most likely to help their parents as their parents grow older. Although this study focuses on one member of the extended family system, an understanding of the adult child's perceptions is necessary to nursing's relationship to the extended family system -- if the adult child is to perform filial tasks that would enhance the

health of the parent(s) rather than accelerate the aging process. The manner in which the adult child perceives health needs of his/her parent(s), whether or not health assistance is expected, and who is likely to help, may or may not be similar to the perceptions of the aged parent(s). The degree to which the adult child's perceptions are congruent with those of the aged parent(s), the more likely the process of interaction between adult child and aged parent(s) can move toward maximum health potential.

The term "maximum health potential" is considered a value term by Rogers (1982). While this is the goal of nursing, it is not defined by nurses for the recipient of nursing care. Rogers (1980) notes that values change as new knowledge revises old views. Since nurses seek to promote well being, interventions are designed to help the adult child evolve in directions that are valued or deemed desirable (i.e., the filial role) which may change over time as the adult child interacts (or does not interact) with his/her parent(s) as they grow older. Nursing interventions change as perceptions of the adult child change. Evaluation is the final component of the nursing process, the formulation of new interventions for goals not achieved. Rogers (1970) supports a cyclical process of evaluation of nursing interventions stating that the dynamic nature of life signifies continuous revision of the nature and meaning of diagnostic data and concomitant revision of interventional measures.

ing

chi

ext

and

is

ter

the

dey

Pe

he

as

h.

d

c

v

r

a

In summary, Martha Rogers' theoretical basis for nursing is utilized to conceptually describe perceptions of adult children about health issues within the context of the extended family system. Based on Rogers' conceptual system and Principles of Homeodynamics, the extended family system is conceptualized to be a "group field" with multiple patterns of human/environment interactions, one of which is the adult child/aged parent(s) interaction. Figure 1 depicts nursing's relationship to the study variables. Perceptions of the adult child concerning health needs, health assistance, and persons likely to help parent(s) as they grow older is considered to be one pattern of human/environment interaction and as such identifiable and describable by nursing. Perceptions of adult children will change over time and as the parent(s) grow older. An understanding of these perceptions (commonalities) are necessary to design nursing interventions that maximize and facilitate the health potential of the extended family system and its members (if the adult child continues to be a caregiver to his/her parent(s) as part of the filial role). The results of this study will contribute to nursing knowledge by assisting nurses to identify, describe, explain, and make predictions about patterns or commonalities of human/environment interactions. Further, results of this study can contribute to the practical component of nursing by providing a knowledge base from

wh

ca

to

li

ins

which creative interventions are derived for the nursing care of adult children who have elderly parents.

In the next chapter, a review of literature pertinent to the research questions is presented. In addition, literature is reviewed to support the use of the particular instrument and method utilized in the present study.

Ma

Va

ce

a.

S

t

t

v

t

v

CHAPTER III

LITERATURE REVIEW

Introduction

The literature reviewed in this chapter focuses on the major constructs of this research and supports its relevance to other literature. The major constructs are: perceived health needs of aged parent(s), perceived health assistance, and perceived providers of health assistance. Since adult children are considered within the context of the extended family system, literature is presented from this perspective to include the concept "health" as a variable modifying perceptions of intergenerational relationships and the filial relationship.

Perceived Health Needs of Aged Parents

"Health" as a variable modifying intergenerational relationships

Results from recent empirical studies suggest that variables associated with the concept of health can be related to certain aspects of the adult child/aged parent

relationship. Such aspects include: the affective quality of intergenerational ties (Halprin, 1979; Johnson, 1978; Johnson and Bursk, 1977). life satisfaction (Collette-Pratt, 1976; Markides et al., 1981), the amount of stress experienced by adults, especially women, caring for aged persons (Brody, 1981; Egerman, 1966; Medinger, 1981; Robinson and Thurnher, 1979; Smith, 1979) and with filial responsibility expectations and realizations (Seelbach 1980).

Johnson and Bursk (1977) interviewed 54 pairs of non-institutionalized white, elderly parents (age 65 and over) and their adult children (age 21 and over) to explore the affective quality of their relationship in four areas: health, finances, living environment, and attitudes toward aging. These areas were related to "family relations" indicator that included a number of questions addressed to both the parent and the child about the openness of communication between them, their enjoyment of each other's company, their ability to count on one another, and an actual rating of the relationship. Their findings suggested that the better the elderly parent's health, the better the relationship between parent and adult child. In addition, the better the elderly parent's attitude toward aging, the better the relationship between elderly parent and adult child.

One year later, Johnson (1978) reported data from interviews with Italian, older, single mothers (age 60

an

an

de

ne

wa

sh

ti

th

tu

pr

a

in

at

th

Eg

ad

th

of

si

St

ad

lie

cor

mic

and over) and their daughters (90 pairs) designed to examine "good" family relationships using the previously defined life areas of health, finances, living environment, and attitude toward aging. Attitude toward aging was the strongest direct predictor of quality of relationships. Living environment had the second highest contribution, while health and finances had an indirect effect through their influence on living environment and attitude.

The value of Johnson's studies in relation to the present study is that the variable "health" is measured by a group of items in contrast to a single item. As an indexed variable, health was demonstrated to influence attitudes toward aging and ultimately other life areas of the elderly adult, such as the parent/child relationship. Eggerman (1966) speculates that this modification of the adult child/aged parent relationship is due to a loss of the usual parent/child relationship, especially as a result of "dependency" problems of the parents. After an extensive review of literature on families with older members, Streib (1976) concludes that poor health and economic disadvantages are among the major sources of problems of families with older members.

Data from other empirical studies support Johnson's conclusions. In a study of patterns of influence between middle-aged adult children (median age 50) and their

pa

ha

re

pe

ca

th

on

tu

ge

ti

to

or

ag

ma

an

co

po

pa

an

pr

pe

he

lit

tic

who

parents ($\underline{N} = 148$), Halprin (1979) concluded that more than half of the adult children tried to influence their parents regarding health issues. Markides et al. (1981) examined perceptions of intergenerational relations and psychological well-being among elderly Mexican-Americans and found that the variable "health" had a strong independent effect on life satisfaction. Collette-Pratt (1976) studied attitudinal predictors of devaluation of old age in a three-generational (young, middle, old) sample ($\underline{N} = 327$). Negative attitudes toward poor health significantly contributed to the devaluation of "old age" for all generations.

In summary, the variable "health" has been directly or indirectly related to the quality of the adult child/aged parent relationship. Although "health" was not the major variable of these studies, it was frequently measured and cited with major significant findings. There is little consistency, however, in the measurement of health. The point to be made is that in some way the "health" of elderly parents modifies the adult child/aged parent relationship and it is not clear what health issues are involved. The present study clarifies the concept of "health of aged persons" by differentiating between their health needs, health assistance and persons providing health assistance. Literature generally supports the premise that better relationships between generations are associated with parents who are perceived to have better health and who are

P

P

R

P

P

S

O

T

O

P

ut

a

su

ce

th

per

th

by

inc

the

hou

lin

dir

perceived to have better health and who are perceived to be functionally able to perform daily activities.

Health needs of aged parents

As with all stages of human growth and development, the period of "old age" is accompanied by changes in biologic, psychological, and socioeconomic function. Few empirical studies are reported in the literature about the impact of parental aging on perceptions of adult children. In this section, literature concerning perceived health needs of aged parents will be organized in the following manner. First, a brief discussion of the basis for instrumentation utilized in the present study will be presented. Second, a discussion of empirical studies will be presented to support the need for the present study.

The scales used in the present study to measure perceived health needs of adult children were adapted from the scales designed by Garlinghouse (1982) who studied perceived health needs of older persons (in Chapter VI, these scales are discussed in detail). Data were collected by means of a self-administered questionnaire from 56 independent older adults age 65 to 89 years who perceived themselves to be in good health and resided in subsidized housing or were volunteer workers in the community. Garlinghouse concluded that older adults need assistance to direct activities toward meeting physical, psychological, and

socio

depen

A

logic

as ag

tensi

sible

Comm

of bo

the f

urina

that

minim

a nee

famil

intim

tasks

great

(Eber

socio

sible

perso

L

house

ceive

ceive

socioeconomic health needs in order to maximize their independence in late adulthood.

According to Garlinghouse (1982) physical, psychological, and socioeconomic changes can be expected to occur as aging progresses in the human life cycle. After an extensive review of literature, Garlinghouse summarizes possible expected changes for face validity of each scale. Common biologic changes of aging may include: hypertrophy of bone at joints, decreased sensory perception in each of the five senses, increased frequency and precipitancy of urination, less restful sleep. Psychological changes that may be associated with the aging process include: minimal change in intellectual ability, changes in roles, a need to leave a personal legacy, continuing supportive family relationships, a need for sexual expression and intimacy, a need to accomplish appropriate developmental tasks. Socioeconomic changes vary widely and depend to a great extent on past financial status and expenditures (Ebersole and Hess, 1980; Kalish, 1975). Examples of socioeconomic needs of elderly persons may include possible difficulty paying utility bills or food, or managing personal finances.

Like the previously cited studies by Johnson, Garlinghouse used multiple scales to measure the concept of perceived health, specifically, perceived health needs, perceived health assistance. In a seminal study most relevant

to

of

year

age

of

que

the

were

tur

were

psy

lem

fin

rea

tur

par

res

lon

stu

pre

gat

(i.

The

adu

to the present study, Simos (1973) studied the viewpoint of Jewish-American adult children ($N = 50$, age 30 to 68 years) in relation to problems of their aging parents ($N = 60$, age 60 to 94). The sample was selected from the clientele of a Jewish family agency after the adult child had requested information or services for a problem concerning their parent(s) who lived in the same community. Data were obtained in personal interviews using a semi-structured interview schedule.

The range of problems perceived by the adult children were categorized into physical problems of the parent(s), psychological problems, family relationships, social problems, problems associated with a lack of care facilities, financial problems, and housing problems. Using inductive reasoning, Simos identifies three major problems as most disturbing to adult children: the failing health of the parent(s) and the resulting need for family and community resources, problems associated with multiple losses, and long-standing interpersonal problems.

There are several problems associated with the Simos' study, and caution must be taken with regard to the interpretation of results. No attempt was made by the investigator to control for characteristics of the aged parents (i.e., institutionalized or living in their own homes). The sample of adult children was taken from a group of adult children who had already decided to seek out a

st

st

cu

le

of

co

pr

ob

fr

ma

Al

ac

in

of

em

he

to

ag

Ph:

far

le.

sul

Pro

service agency for a particular reason. Because the sample size was small ($N = 50$), and it was taken from one cultural group, it can be argued that the study is more or less an evaluation study of a service agency and does not offer generalizable explanations.

According to Rogers (1970), theories emerge out of a conceptual system through what is typically an inductive process. Polit (1978) notes that in the building of theories, observations are made about natural phenomena or findings from interrelated studies and then links or hypotheses are made to develop a more abstract explanation of relationships. Although adult children continue to provide parent care activities, little is known about their perceptions regarding specific health issues of their parents. The usefulness of Simos' study lies in the fact that it pioneered the empirical investigation of perceptions of adult children about health issues pertaining to their parents and it attempted to categorize these health issues according to needs of aging parents as perceived by their adult children.

Physical health needs

In Simos' study, almost all of the sample of aged parents had physical problems ranging from serious disease (e.g., cardiovascular disease) to serious disability resulting from chronic disease (e.g., glaucoma). If physical problems were combined with psychological problems, the

adult child had little time to help with other problems their parents may be experiencing. Simos concludes that the study "clearly showed that the aging process itself was responsible for the physical problems of the parent" p. 79). It is not clear what is meant by "the aging process" since the sample of adult children reported changes associated with aging intermingled with physical problems associated with disease or mismanagement of drug therapy.

Studies about care of elderly persons by family members report findings that indicate physical problems of the elder are particularly stressful to the caregiver. Smith (1979) studied the effects of role strain on middle generation women (age 40 to 69 years, $N = 24$) and concludes that the degree of strain experienced was related to the level of care necessary and the degree of confinement they experienced. Similar findings have been reported by other researchers (Robinson and Thurnher, 1979; Townsend, 1965).

Psychological health needs

In the Simos' sample of adult children, all the parents were perceived to have psychological problems. The parents' general unhappiness was the most frequently reported psychological problem and depression was the second most frequently reported cause of discomfort to the adult children. Both conditions seemed to develop as the parents grew older. One-quarter of the adult children reported

W

D

R

R

R

O

S

R

A

A

S

A

R

F

R

R

C

C

G

C

R

t

a

i

S

A

C

warm relationships with no serious rifts or family alignments, while three-quarters reported a variety of familial problems resulting from "parental aging."

Parental mourning was recognized by the adult children primarily when the loss had to do with a significant other, such as a spouse or child, or with a loss of health. Simos concludes that rarely did an individual adult child realize that the parent might also grieve over other losses as loss of a job, a social role, self-esteem, independence, a life-time home, or the failure of bodily functions or sensory acuity. Isolation and denial behaviors used as defenses by the parents were perceived by their adult children as a lack of feeling on the part of the parents. Feelings of helplessness and despair as well as expected reactions to loss were viewed as stubbornness of the parent(s) and/or evidence of senility.

Stevenson (1977) suggests that the middle-aged adult child is in a position to help the older generation progress through the later years. This means that the adult child must be familiar with developmental tasks and other psychological needs of later life and, in a way similar to the developmental process pursued with children, act as a growth-enhancing force rather than a growth-impeding force in the older person's life. Too often middle-aged offspring attempt to control the lives of their elders with authoritarian tactics that promote hostility, dependence, or guilt (Egerman, 1966; Hirschfield, 1979; Rautman, 1972).

Much confusion about generational relationships center about the concepts of dependence-independence (Spark and Brody, 1965; Steinman, 1979) and acceptance-rejection conflicts (Steinman, 1979). Simos would add the concept of loss as a psychological and generational problem within families who have elderly members.

Socioeconomic health needs

In the Simos' study, adult children frequently admitted being unable to distinguish between their parents' actual social problems and what they thought should be their parents' social problems. Adult children felt their parents would be happier if they were socially involved and socially active. Some of the adult children stated they felt uncomfortable visiting their parents when "there is nothing to do, we just sit there." In general, adult children did not think they might support their parents emotionally merely by their presence and interest.

Another major social problem was the parents' reluctance to socialize because of limited functional impairments as poor vision or arthritis. They were often puzzled by parents who did not initiate social contacts but who might have been outgoing and sociable when they were younger.

Adult children tended to blame "the system" for making it financially prohibitive to care for their parents and believed it was society's responsibility to support their

parents as payment for past productivity. When parents were relatively healthy, the dread of future illness with the accompanying medical expenses hovered in their minds as a contingency with which they could not deal because prediction or preparation was impossible.

In general, adult children felt their primary financial obligation was to their own nuclear family and then to their married children and grandchildren. Most of the sample of adult children were reconciled to the inevitability of one or more housing changes as their parents grew older and as the need for comprehensive medical care and nursing care increased.

In summary, literature available on physical, psychological, and socioeconomic health needs of aged parents as perceived by their adult children is limited. Generally, physical health needs are perceived by adult children in relation to the level of functional impairment of the parents and the degree of confinement experienced by adult children.

The most frequently reported psychological health needs of older parents as perceived by their adult children center around the concept of loss. Adult children frequently misunderstand and misinterpret their parents' psychological health needs.

In the area of social problems of parents, adult children were most subjective and tended to view their parents' social needs in terms of themselves. Social problems

resulted from the children's desire that the parents be socially involved and from the children's inability to accept the parents' difficulty in making new contacts.

There appears to be a shift in the adult child/aged parent relationship taking place with deterioration in the health of the parent(s). Adult children consider interpersonal problems as long-standing and resulting from the parents' personality structure which had become solidified by age. Parents were perceived strictly in the present and were perceived on the basis of the parenting they had provided or had failed to provide during the adult child's formative years. In many instances, adult children perceive the needs of their parents based on past relationships; present or future relationships were difficult to consider.

Perceived Health Assistance for Aged Parents

The filial relationship

In a study related to the Johnson's studies and the Simos' study, Ames (1982) compared perceptions of elderly parents and their adult children (50 pairs) regarding supportive services for the elderly parent via data collected in home interviews. Ninety percent of the adult children visited their parents at least weekly. Adult children perceived they were spending a significantly larger amount

of time listening to their parents' problems than did parents. Both generations agreed on the amount of time spent in instrumental activities (i.e., home maintenance). Using a combined measure of physical, emotional, and financial independence, parents judged themselves significantly more independent than did their children. Although the concept of future health needs of the elderly parents was not a major study variable, Ames concluded that there was general agreement between parents and their adult children as to ideal living arrangements and types of services needed and that adult children were providing considerable emotional support to their parents.

English (1979) attempted to answer the question "what do grown children owe their parents?" She argues that adult children do not "owe" help to parents as a "debt" of gratitude, but that when there is a close bond between parent and child, then they help one another as friends do. Where friendship is lacking, nothing is owed. Child-parent relations in earlier stages of family development often are characterized by a superordination/subordination relationship. Once the child leaves and is freed of this relationship, it is possible to develop mutual respect and caring for one another (Hess and Waring, 1978). English suggests that filial obligations of grown children are a result of friendship characterized by mutuality rather than one of "reciprocal favors." Other

investigators would support the need for friendship as a mode of assistance between adult child and aged parent (Cohen, 1978; Hess and Waring, 1978; Johnson, 1982; Troll, 1980).

In 1965, Blenkner coined the term "filial maturity" to indicate the adult child's capacity to be "depended on" by his/her elderly parent(s), thus socializing the adult child to his/her own "old age." Due to increased longevity, Blenkner observed that it was "becoming increasingly sterile to view the latter two-thirds of life as mere repetition and re-enactment of the first third" (p. 56). Filial maturity is an expected adult transition from "genital maturity" which occurs early in the human life cycle to "old age." Blenkner was concerned with conceptual clarity of a developmental sequence in the human life cycle rather than a chronological span of years. A filial crisis marking childhood's end can be expected to occur for most individuals in their forties or fifties. A filial crisis is characterized by the middle-aged adults' realization that their parents can no longer be viewed as a main support in times of emotional trouble or economic stress but instead need their comfort and support. Performance of the filial role, which involves being depended on and therefore being dependable insofar as the individual's parents are concerned, leads to filial maturity of the middle-aged adult. According to Blenkner, performance of

filial tasks and assuming the filial role, socializes the middle-aged adult for successful accomplishment of the developmental tasks of old age, the last of which is to die. Through identification with the parents as in childhood, the middle-aged adult prepares for his own old age.

Central to the concept of filial maturity is the concept of dependency. Spark and Brody (1965) observe that increased dependency needs of older people have led to unfounded formulations of "role reversal" or the adult child becoming the "parent" to his/her elderly parents. The idea of "role reversal" as proposed by Rautman, a clinical psychologist, in 1962 is largely theoretical. Rautman assumes that all old people become dependent and "aging" is equated with deterioration and disease. Few empirical studies and analysis of demographic trends would support this premise. Blenkner notes that the concept of role reversal is not a normal but a pathological development in the adult child/aged parent relationship. From a more recent psychological perspective, Weishaus (1979) points out that a frequent reaction to cumulative losses throughout the aging process (i.e., loss of health) is a dependency pattern. The aging person turns to another -- usually a spouse or an adult child -- and attempts to obtain from that single source the gratification that previously came from many sources. Empirical research (Egerman, 1966; Shanas, 1979; Sussman, 1974) has demonstrated that aging parents do turn to and depend upon their adult

children for help in meeting daily requirements of living. Spark and Brody (1965) modify Blenkner's concept of filial maturity to include consideration of the adult child's life situation (physical, emotional, and social) and consideration of the aged parents' capacity to be dependent -- i.e., to permit the adult child to become filially mature.

Although the concept of filial maturity is not a well documented developmental sequence from the perspective of adult children, related concepts have been empirically studied from the parents' perspective. Seelbach (1978) reports data concerning filial responsibility expectations and realizations among 595 low-income, elderly parents with adult children. Filial responsibility expectations was defined as the level of expectations that older parents had regarding the duties and obligations of their offspring. Behavioral realizations of filial responsibility was defined as the level of filial aid and support received by the parents. Age, marital status, income, and health of the elderly parent were significantly associated with both filial responsibility expectations and behavioral realizations. On the basis of his findings, Seelbach draws the following conclusions about filial responsibility expectations and realizations from the elderly parents' perspective. First, as the parents become older, they tend to expect more from their adult children in the

way of filial aid and support. Second, married elders tended to depend more upon their spouses than upon their children, but once the spouse dies, the surviving parent expects more from adult children. Third, parents having lower incomes tend to have more needs and higher expectations than parents with higher incomes. Finally, parents intended to expect help from their children only when aid or support was actually needed, e.g., when health fails.

In a similar study (using the same variables and measurement tools) conducted in 1980, Seelbach studied a Philadelphia sample of 442 blacks and 143 white parents over 65 years of age to determine if filial responsibility expectations and realizations were significantly higher among blacks than among whites. All of the respondents had low income and were similar in terms of filial expectations and realizations. Data did not support the hypotheses that filial expectations and realizations varied among races. Data supported the notion that what may appear to be racial differences in family structure and functioning may actually be socioeconomic differences.

During Johnson's interviews of Italian mothers and their daughters (1978), an interesting observation was made. When participants responded to the question why they thought their relationship was good or bad, 47% of the mothers and 38% of the daughters said that their respective daughter or mother met family role expectations.

A second reason for a "good" relationship offered by 46% of the mothers and 43% of the daughters was that their relationship with their respective daughter or mother was cumulative and had been consistent over time.

Similar findings were reported by Seelbach and Hansen (1980) in a comparison study of institutionalized elderly persons ($N = 160$) and community-dwelling elderly persons ($N = 207$) whose mean age was 79.8 years. While 80% of the sample were satisfied with their family relationships, significant differences were found between the young-old and the old-old, the married and the widowed, as well as between institutionalized and community-dwelling elderly.

Brody (1979) states that as with other life crises, filial maturity cannot be achieved in a vacuum unrelated to the dynamic context of the total family. Filial maturity not only involves the parent-child dyad, but spouses, siblings, in-laws, other relatives as well and is complicated by their personalities, attitudes, reactions, behaviors. The structure and dynamics of extended family relationships affect the outcome of the filial crisis. Brody states that if the adult child must acquire the capacity to be depended on, the elderly parent must have the capacity to be appropriately dependent and thus to permit such growth.

Additional characteristics of assistance

As noted in Chapter I, Hess and Waring (1978) conclude, after an extensive review of literature on intergenerational relations, that the adult child/aged parent relationship is in transition, from one based on obligation due to economic interdependence to one that is voluntarily assumed and based on emotional ties. In terms of attitudes toward family responsibilities, the investigators suggest that "extended expectations" are being replaced by "minimal anticipations" of care from adult children. The maintenance and sustenance of the adult child/aged parent bond will be increasingly based upon the willingness of both family members to engage in supportive behaviors, and that this willingness often hinges on the quality of the relationship over many preceding decades (Troll, 1980).

Robinson and Thurnher (1979) examined the experiences of adult children (ages 39 to 65 years, $N = 49$) in caring for an aged parent (ages 64 to 97 years, $N = 60$) over a five year period. Parents with physical and/or psychological disabilities received more help from an adult child. From the perspective of the adult child, gratifying relationships with parent(s) seemed to depend largely on the relative independence of the parent(s) and the values and cherished lifestyle of the adult child. It was not so much the actual instrumental activity involved in the care of the parent which was perceived as burdensome, but the

routines and confinement that were brought about by the parents' need. To the extent that changes in the adult child/aged parent relationship across the five-year period of study were mentioned, comments were more likely to be negative than positive. Adult children were providing assistance to their parents in the form of emotional support and activities of daily living; few were providing financial assistance to their parents. From a developmental perspective, Robinson and Thurnher observe that the coincidence of the parent's maximum demands with the adult child's own awareness of shrinking futurity exacerbates stress and conflict and underscores the need to identify ways for reducing stress in both generations. Data support other research findings (Brody, 1978; Smith, 1979) that adult children strive to delay the parents' institutionalization at considerable cost to themselves. In addition, prolonged dependency needs of parents increase the stress experienced by the caregiver.

In summary, accomplishment of filial maturity involves the capacity or willingness of the adult child to be depended on and the parents' capacity to be appropriately dependent. While assistance patterns between adult child and aged parent persist, their relationship is in transition, from one based on obligation to one that is based on a volunteeristic model. Assistance provided by adult children tends to be in the form of instrumental help with

daily activities (particularly when parents are ill) and in the form of emotional support. Consideration of the life situation of the adult child and level of care required by parents are major factors affecting assistance patterns.

Perceived Providers of Health Assistance

The family of older persons continues to be the major source of support identified by elderly persons. Eighty percent of all medically-related and personal care services are provided by family members (U.S. Public Health Service, 1972). Based on national data, Shanas (1979) reports that older people are most likely to turn first to family, then to friends and neighbors, and last to social and government agencies, particularly during times of illness. The traditional role of family members as providers of assistance to older persons may be affected by recent sociodemographic characteristics of families such as: geographic mobility, smaller family size, fewer unmarried children, and increased participation of women in the workforce (Treas, 1977).

Weeks and Cueller (1981) suggest that major "group differences" exist in the helping networks of older people. Using data from a survey of 1139 older persons representing ten different ethnic groups, the investigators found that immigrants were more likely than native-born older persons

to

co

ha

cf

e:

c:

(a

pe

ax

s:

(a

h:

A:

l

t:

m

s:

t:

i

a

n

l

b

l

p

to have family members to turn to in times of need. They conclude that although members of family networks may have to assume a more important role in the coming era of dwindling resources, these helping networks are not evenly distributed throughout the older population. Babchuk's study (1978-79) of 800 non-institutional persons (age 45 and over) supports the observation that few older persons are isolated from helping networks and that kin are not necessarily part of what the older person considers to be his/her "primary group" helping network.

In a comparison study of a sample of disabled elderly (age 60 and over) who were residents of public and private homes ($N = 534$) and those were clients of Home Health Agencies ($N = 485$), Brody (1978) reports that differential levels of functioning ability did not predict placement of the chronically ill/disabled in institutions or in the community. Rather, the presence of a caring unit (e.g., spouse, children, or other relatives) is the key variable that explains the placement of chronically ill/disabled individuals. The five percent of those persons 65 years and over who live in institutions at any one time are outnumbered two to one by equally disabled older persons living in the community, a proportion that remained stable between 1962 and 1975 (Shanas, 1979). Johnson and Catalano's study (1981) of a sample of childless elderly persons ($N = 28$) suggests that marital status is the major

determinant of the quality of support received and the patterns of adaptation in later life. Childless married elderly persons were more isolated and tended to rely primarily upon each other, while the unmarried elderly persons were more resourceful in using a long-term accumulation of social resources to meet their needs.

Lopata (1978) examined various support systems of Chicago area widows ($N = 1169$) by means of two different one-hour interviews. Support systems included economic support system (i.e., gifts of money or food, help paying for rent); service support system (i.e., transportation, care during illness and help with housework); social support systems (i.e., visiting, celebrating holidays); and emotional support systems (i.e., relational sentiments, self-feeling states). The hypothesis predicting an active modified extended family network with exchanges of supports from separate households was not supported for any relatives other than children of the widows. Kin members, such as siblings and relatives not directly in the parent-child line, were not important contributors to the support systems of this particular sample of widows. Friends tended to be regarded as companions in social activities. Other related studies (Shanas, 1980; Sussman, 1974) further demonstrate that aging parents do turn to and depend upon their adult children to help with their daily requirements.

Fandetti and Gelfand (1976) report data gathered from

i

c

b

t

r

t

i

a

c

p

s

p

(l

a

re

re

ar

a

e

ba

su

vi

ca

th

interviews composed of an open-ended and structured schedule conducted with a sample of Italian and Polish family members (age 21 to 50 years) in Baltimore. The purpose was to ascertain preferred living arrangements for elderly relatives, attitudes toward non-family resources, and feelings toward non-ethnic caretakers. A majority of the respondents indicated a preference for intergenerational household arrangements for ambulatory relatives, a preference for church rather than governmentally operated services, and a positive attitude toward well-trained, non-ethnic professional caretakers.

To explore the attitudes and preferences for service providers among three generations of women, Brody et al. (1979) interviewed family triads ($N = 240$) of grandmother, adult daughter, and young adult granddaughter. Two instruments were used: the first, consisted of forty-seven statements relating to aging, gender roles, dependence/independence, and filial responsibility in which responses were scored on a Likert scale of one to five, the second instrument elicited the subjects' preferences for service providers based on their own existing or projected needs in old age. Subjects were asked to rank their own preferences for service providers from six possible sources for each of eight categories of service.

Although the investigators reported differences between the generations, certain themes were endorsed by all

genera

feelin

young v

elder

people

and th

elderl

of wom

mother

data m

projec

life s

servat

maturi

that d

value

words,

the "o

genera

sharin

made b

her, l

appropri

The

for sex

child f

generations. Attitude data generally supported strong feelings of filial responsibility of both middle-aged and young women and their willingness to be depended on by the elder family member. All three generations agreed that old people should be able to depend on adult children for help and that adult children should keep in close touch with elderly parents. Interestingly, the youngest generation of women felt more strongly than their mothers and grandmothers about filial dependability. Brody suggests the data may reflect the inability of the younger generation to project themselves psychologically and may reflect age and life stage rather than a generational trend. This observation would support Blenkner's premise that filial maturity is a developmental phenomena. Brody emphasizes that data do not reflect a moving away from the traditional value of family responsibility to older members. In other words, the "new value" of women working has not diminished the "old value" of family care of the elderly. The three generations were more in favor of sons of elderly parents sharing parent-care equally with daughters, an observation made by other researchers (Brody, 1981; Robinson and Thurnher, 1979) of the changing attitudes with respect to gender-appropriate roles.

There was generational agreement on some preferences for service providers. All generations preferred an adult child for intimate functions such as help with problems

(i.e.
gene
selv
hous
gene
and
time
fami
fere
note
as s
ing
show
frie
(John
this
tion
supp
peop
mote
conc
plis
goric
peop
genit
diver

(i.e., confidant) and with financial management. Middle generation women preferred "private-pay sources" to "themselves" for personal care and instrumental services (e.g., housework, home repairs and meal preparation). Middle generation women expressed the need for emotional closeness and confidentiality rather than services that involve time and "hands-on" activity. In all three generations, family bonds and responsibility were seen as quite different from money or concrete services. The investigators note that the unpopularity of friends, neighbors, volunteers as service providers should not be interpreted as eliminating them from such roles; childless older persons have been shown to benefit significantly from services provided by friends and neighbors who assume a surrogate family role (Johnson, 1981; Cantor, 1975). Shanas (1979) describes this social support pattern as the "principle of substitution". This principle emphasizes the primacy of filial support; however, it can be extended to suggest that older people will substitute close relationships with more remote kin when children are not available. Brody et al. conclude that their data confirm the fact that "no simplistic scheme which sorts types of service into neat categories by appropriate providers is applicable to all older people and their families" (p. 29). Rather, the heterogeneity of needs of families with older members requires a diversity of options.

co

ti

an

by

D

co

m

co

co

m

v

co

co

e

p

e

p

b

w

d

"i

s

s

b

Archbold (1982) investigated the impact of "parent-caring" on the lives of 30 Caucasian women to identify those factors which influence decisions about parent-caring, analyze caregiving behaviors, describe the strategies used by caregivers, and analyze the consequences of caregiving. Data were collected using a focused interview, participant observation, and a multi-dimensional functional assessment. Qualitative analysis of data suggests the existence of three parent-caring roles: care provision (identification of parent needs and provides services directly), care management (identification of parent need and manages the provision of care by others) and care transfer (transfers all caregiving to another agent).

Archbold identifies four factors that influence whether or not an adult child assumes a parent-caring role: socioeconomic status, housing arrangements, illness onset of the parent(s), and past experience with caregiving. Socioeconomic status is of greatest importance; income is the primary determinant of whether and how many services can be purchased. Problems encountered by the adult child were related to the caregiving role assumed by the individual. Adult children who considered themselves to be "managers of care" required skills in both individual and systems assessment as well as in negotiation with the social system. Those who were "providers of care" were too burdened with physical care of the parent(s) to focus on

c
b
s
c

r
c
a
r
a
t
c
a
l

a
c
a
t
t
t
t
t
t
t
c
e
s

other types of support. Often care providers experimented by trial and error for long periods before a satisfactory solution to a problem of their parents was worked out and, once established, the solution was rigidly adhered to.

Based on an analysis of national data, Brody (1979) notes that the amount of care provided by families to older persons is greater than that provided by formal care and other support systems. Eighty percent of medically-related care and personal care are provided by families as well as activities as household maintenance, cooking, transportation, and emotional support. The vast majority of services are provided by a spouse, if there is one, and by daughters and daughters-in-law (Litman, 1974; Shanas, 1967; Stehouwer, 1965; Sussman, 1965).

Care of elderly persons involves complex bureaucracies as well as family members. Litwak (1965) developed the concept of shared functions where formal organizations and families must coordinate their efforts if they are to achieve their goals. It is likely that family and kin networks will play facilitating and mediating roles for their elderly members in dealing with service organizations (Treas, 1977). Sussman (1977) suggests that family members may have to assume a linking role in addition to a caregiving role. The motivations, skills, special interests, experiences, and training as well as the circumstances, situations, age, and sex of members are among the main

factors
member
the lin
dealing
family
tion.
may need
pendence

Des
relatio
their p
from th
ren, no
tion of
there i
are inv
adult c
quality
Factors
include
familie
side th
of care
whether

factors which determine whether the individual family member takes the initiative in linking. The objective of the linking role is to develop skills and knowledge for dealing with bureaucratic organizations in order to meet family needs and objectives in a particular life situation. It is likely that adult children of aged parents may need to be socialized to the linking role as the dependency needs of their parents increase with aging.

Summary

Despite recent historical changes in traditional filial relationships, adult children continue to provide care to their parents and their parents expect various services from them particularly in times of illness. Adult children, notably middle-aged women, constitute a major portion of the helping network of elderly persons although there is some evidence to suggest that male adult children are involved as well. In addition to the willingness of adult children to provide care, several factors affect the quality and quantity of help provided by adult children. Factors that have been identified in available literature include: change in sociodemographic characteristics of families, particularly the increase of women working outside the home; the health status of the parents; the level of care required by the parents (instrumental, affective); whether or not care is unexpected, normative, or on-time;

the li
ings a
confir
assume

Th
percep
parent
ance i
to hel
this s
small
future
health

In
study

the life situation of the adult child; attitudes and feelings associated with caregiving, especially feelings of confinement and stress; and the type of caregiving role assumed by the adult child.

There is no general agreement in the literature about perceptions of adult children as to what health needs their parents may experience as they grow older, if health assistance is expected, and who would be the person most likely to help their parents with a specific health need. In this study, the researcher will describe perceptions of a small population of adult children about their parents' future health needs, health assistance, and providers of health assistance.

In the next chapter, the methodology utilized in this study for collection of data is presented.

CHAPTER IV

METHODOLOGY

Overview

This descriptive study was designed to identify perceptions of adult children concerning health issues of their aged parents. Perceived health needs, perceived health assistance and perceived providers of health assistance were measured as major study variables. It was expected that the results of data analysis could specifically identify and describe perceptions of adult children about their parents': future physical, psychological, and socioeconomic health needs, whether or not health assistance would be expected for these health needs, and who would be likely to provide health assistance. Sociodemographic information about adult children and their parents was collected to characterize the study sample.

A discussion of the methodology and procedures utilized in this research study is presented in this chapter. Initially, a brief discussion of the study sample is presented followed by data collection procedures, instrumentation, operationalization of study variables, descriptive

variabl

cedures

cedures

The

47 adul

questio

not the

study c

charact

Results

all adu

defined

(1)

(2)

(3)

(4)

variables concerning the adult child and aged parents, procedures for data analysis, and human rights protection procedures.

Sample

The study participants were a convenience sample of 47 adult children who voluntarily agreed to complete study questionnaires. Because the sample was voluntary and not the result of random selection, the results of this study can be generalized only to adult children possessing characteristics which were similar to those of the sample. Results should not be considered to be representative of all adult children with aged parents. An adult child was defined as an individual who met the following criteria:

- (1) age 30 up to and including age 64;
- (2) willing to participate in the study;
- (3) able to read and write in the English language;
- (4) at least one or both parent(s) were living, age 65 or older, retired, and lived outside of a recognized health care institution and separate from the adult child participant.

Prof
investigat
requeste
child pa
and frie
the inve
pants wh
that the
choose t
Peers an
ticipant
them.

Peer
Appendi
to each
tentia
gator ex
nurses l
needs of
is expect
Barbara
State Un
explaine
answerin
ance for

Data Collection Procedure

Professional peers and friends were contacted by the investigator who explained the purpose of the research and requested names of persons who might qualify as an adult child participant. A written checklist was given to peers and friends stating necessary criteria and preferences of the investigator (Appendix A). Names of possible participants who were not professional nurses (with the exception that the peer or friend who was a professional nurse could choose to participate) were returned to the investigator. Peers and friends were asked not to contact potential participants and were asked not to discuss this study with them.

Peers and friends were asked to co-sign a form-letter (Appendix B) which would be sent with a stamped post-card to each potential participant. In the letter to the potential participant, the co-signed party and the investigator explained that the purpose of the study was to help nurses learn more about how adult children perceive health needs of their parents and whether or not health assistance is expected. The research project was being conducted by Barbara Jepson-Taylor, R.N., a graduate student at Michigan State University in the College of Nursing. It was further explained that becoming involved in the study would entail answering questions about health needs and health assistance for their parents which would take approximately

one-half

their n

would l

Po

willin

ing "y

mailin

card,

and qu

stampe

Partic

return

within

Co

lette

parti

tact,

cards

up th

R

the s

for t

betwe

1921)

one-half hour to complete. Participants were assured that their names and all of the information on the questionnaire would be kept confidential.

Potential participants were asked to indicate their willingness to participate in this research study by checking "yes" on the back side of the enclosed post-card and mailing it to the investigator. After receiving the post-card, the investigator mailed a cover letter, consent form, and questionnaire (Appendix C), and a self-addressed stamped envelope to each participant within three days. Participants were asked to complete the questionnaire and return it to the investigator in the enclosed envelope within five days.

Collection of data took place in Fall 1982. Ninety-one letters with post-cards were mailed. Of these potential participants, 47 met criteria, one wished no further contact, 15 did not qualify, and 28 did not return post-cards or questionnaires. No attempt was made to follow up those who declined participation.

Methodology

Recent empirical evidence supports the proposition that the study of "perceived generation differences" is useful for the understanding of developmental phenomena not only between generations (Ahammer, 1972, Bengston, 1979; Green, 1981), but within the context of the extended family system

(Collette-Pratt, 1976; Egerman, 1966; Halprin, 1979; Johnson, 1978; Johnson and Bursk, 1977; Johnson, 1982; Robinson and Thurnher, 1979; Seelbach, 1978; Simos, 1973; Smith, 1979; Sussman, 1979). Green (1981) critically reviewed research on attitudes and perceptions about older persons and concludes there are problems with methodology such as psychometric quality of instrumentation and lack of generalizability. Green suggests that research methodologies using multiple measures in specific contexts would better clarify the relationship between perceptions and their behavioral implications.

Luker (1981) contrasts research methods used in evaluation research with the nursing process used in nursing research. Both inherently involve a combination of basic assumptions underlying the activity or object being evaluated and of personal values on the part of those who are doing the research. Hence, the evaluation process and the nursing process begins with a recognition of values which may either be explicit or implicit.

After a review of studies of families with older members, Troll (1980) notes that one viewpoint on generational relations is to look at the transmission of perceptions, of beliefs, values, and attitudes from child to parent and, reciprocally, parent to child. In general, families tend to react to the aging of their members in terms of their shared family theme or value system. The conceptual framework utilized in the present study, based on Rogers'

theoretical basis for nursing (as described in Chapter II), would support the need to recognize values laden in research implications.

The instrument utilized in this study was adapted from that developed by Garlinghouse (1982) to measure perceptions of older persons about their own health needs and health assistance as they grow older. To better understand the concepts of perceived health and wellness of older persons, Garlinghouse designed the instrument primarily based on non-pathological changes and signs and symptoms frequently reported by older persons as aging progresses throughout the later part of the human life cycle. The instrument was chosen by the investigator for its psychometric quality (discussed in Chapter IV) and for its emphasis on perceived health issues (health needs, health assistance, and providers of health assistance).

To summarize, research methodologies used in studies of families with older members tend to support the need to study perceptions of adult children concerning specific situations involving the adult child and aged parent(s). Methodologies should begin with a recognition of values by the investigator/practitioner which may be implicit or explicit, and methodologies should include instruments with psychometric quality so that behavior implications can be derived. Little is reported in the literature about the perceptions of middle-aged adult children regarding health

needs of their parent(s) as they grow older, if health assistance is expected, and who would provide health assistance to their parent(s) should they experience a health need. The purpose of this study is to describe a sample of adult children and their perceptions concerning their parents using an instrument with some demonstrated psychometric quality.

Instrumentation

Development of the instrument

The instrument utilized in this study was adapted from that developed by Garlinghouse (1982) to measure perceptions of older persons about their own health needs and health assistance as they grow older. Items used in the instrument were derived from an extensive review of literature on frequent non-pathological changes experienced by and signs and symptoms usually reported by elderly persons. Table 1 includes items pertaining to physical, psychological, and socioeconomic health needs and the manner in which the items were adapted for use in this study.

The Garlinghouse instrument was adopted for use in this research study for the following reasons: its emphasis on perceived health issues and for possible use as a clinical tool in nursing. Garlinghouse reported the following coefficient alpha computations as estimates of internal consistency:

Table 1. Items Pertaining to Physical, Psychological, and Socioeconomic Health Needs and the Manner Adapted from the Scales Used by Garlinghouse (1982).

Health Need	Manner Adapted
<u>Physical Health Needs</u>	
1. pain and stiffness in joint	same
2. a need to reduce their calorie intake	altered from "a need to change diet"
3. shortness of breath	same
4. constipation	same
5. a need to urinate more often	same
6. inability to hold their urine	same
7. cold hands and feet	same
8. numbness of hands and/or feet	same
9. swelling of hands and/or feet	same
10. increasing deafness	same
11. a change in their ability to smell odors	same
22. visual changes	same
23. loss of balance	same
24. daytime tiredness	same
25. difficulty chewing	same
26. problems with denture fit	altered from "denture problems"
27. increased difficulty doing household tasks	same
28. changes in their daily routines	same
29. increased difficulty adapting to extreme changes in weather	added
30. safety problems at home	added
38. chronic health problems	added
39. more side effects from medications	added
40. brief awakenings during the night	added
41. sleep loss	added
42. a longer time to recover from illness	added
43. more days when they don't do their usual activities	added
44. symptoms of disease differently from a younger person	added

Table 1. Continued.

Health Need	Manner Adapted
<u>Psychological Health Needs</u>	
12. changes in sexual and marital relations	same
13. increased need for family closeness	same
14. desire to reminisce	same
15. difficulty in following any prescribed medication schedule	same
31. feelings of uselessness	same
32. some degree of forgetfulness	same
33. a decrease in their ability to learn new things	same
34. difficulty making up their mind	same
35. difficulty thinking through problems	same
46. taking more time to perform routine activities	added
47. more times when they will act like children	added
48. decreased ability to cope with situations	added
51. a need for parent-like guidance	added
<u>Socioeconomic Health Needs</u>	
16. possible difficulty paying for food	same
17. possible difficulty paying for housing	same
18. possible difficulty in ability to purchase desired clothing	same
19. possible difficulty paying for health care services	same
20. possible difficulty paying for utility bills	same
21. possible difficulty paying for social activities	same
36. possible difficulty managing personal finances	added
37. possible difficulty arranging for health care services	added

Table 1. Continued.

Health Need	Manner Adapted
45. decreased number of social contacts	added
49. decreased interest in current events	added
50. difficulty planning a balanced diet	added

Perceived Health Needs (Total)	.91
Perceived Physical Health Needs	.86
Perceived Psychological Health Needs	.86
Perceived Socioeconomic Health Needs	.94
Perceived Expected Assistance with Health Needs (Total)	.96

For each specific health need, participants were asked if they expected their parents to require help with the need. To further clarify the variable perceived health assistance, participants were asked to identify the person most likely to help their parents with a specific health need.

In the original instrument, a "health activities" section was included because of its relevance to the Garlinghouse study (1982). Part B of the questionnaire utilized in the present study (Appendix C) pertains to health activities that adult children expected their parents to do to maintain health and overcome health problems. Although this part of the questionnaire was not changed from the original except for the stem question, data obtained from this section was not used as part of this research study. Data were collected from Part B to further validate the instrument at some future date by the investigator.

Part A and Part C of the questionnaire (Appendix C) were used in the present study. Part A contained fifty-one health need questions used to measure each of the major variables of this study. The following is a list

of study variables and the number of items used to measure variable:

Perceived physical health needs	27 items
Perceived psychological health needs	13 items
Perceived socioeconomic health needs	11 items
Perceived health needs (total)	51 items
Perceived health assistance for physical health needs	27 items
Perceived health assistance for psychological health needs	13 items
Perceived health assistance for socioeconomic health needs	11 items
Perceived health assistance for total health needs	51 items
Perceived providers of health assistance for physical health needs -- 12 choices of providers for 27 health need items	
Perceived providers of health assistance for psychological health needs -- 12 choices of providers for 13 health need items	
Perceived providers of health assistance for socioeconomic health needs -- 12 choices of providers for 11 health need items	

Part C of the questionnaire contained questions pertaining to sociodemographic characteristics and other descriptors of the adult child participant (Items 9 through 24) and his/her parent(s) (Items 1 through 8). The format of the instrument was similar to the original and designed to minimize the amount of reading necessary, to avoid lengthy sentences, and to require a minimum of writing skills.

Pretest of the study instrument

The entire instrument (Appendix C) was pretested for readability, clarity of directions, length, and time

required for completion by two graduate nursing students, two members of the nursing faculty with research expertise, and by four adult children similar to the sample of adult children utilized in the study. All of the pretest subjects found the instrument easily completed within thirty minutes.

Reliability and validity

Reliability of the instrument was assessed by means of an internal consistency measure (Crano and Brewer, 1973). To determine the degree to which items within each of the eight scales were related to one another, internal consistency was computed using the coefficient alpha method. The coefficient alpha, or reliability coefficient, reflects the extent to which an instrument is free of variance due to extraneous factors and ranges from 0 to 1.00. The closer a reliability coefficient is to 1.00 the more the instrument is a reflection of the true differences of test subjects on the scale. A reliability coefficient of .70 or above is considered satisfactory for group level comparisons as are involved in correlational research (Polit and Hungler, 1978). Should a satisfactory level of reliability not be obtained, addition of more items positively correlated with the other items of the scale would increase the reliability coefficient. If the coefficient alpha is .80 or higher, the instrument or scale may be considered to possess high internal consistency (Crano and Brewer, 1973).

Validity refers to the degree to which an instrument measures the attribute or concept which it intends to measure and is more difficult to measure than reliability. There are several types of validity (face, content, concurrent, construct, predictive) and the general purpose or intent of the study dictates the type of validity estimated (Borg and Gall, 1973). It is not possible to develop objective criteria against which to compare measures of abstract traits such as perceived health needs or perceived health assistance. Therefore it becomes necessary to depend on subjective criteria to evaluate the face validity of the instrument. Efforts toward assuring a high degree of face validity of the instrument included: adapting an instrument with an established degree of psychometric quality as it is a necessary though not sufficient requisite for reliability; using an instrument designed to measure perceptions of health issues; review of literature; consultation with two faculty members with research expertise; pre-testing the instrument; and, judgment of the investigator as to the face validity of the items based on previously reviewed literature.

Operationalization of Study Variables

Perceived health needs (total)

Perceived health needs (total) were measured by the use of 51 questions (Part A, Columns 1 and 2 of the

questionnaire, Appendix C) concerning specific requirements of aged parents which must be met if they are to function at their maximum physical, psychological, and socioeconomic potential. The format of the question consisted of an initial stem-statement of expectation followed by a health need in the second column and a five-point Likert-type scale in the first column on which the adult child participant was able to indicate his/her agreement or disagreement with the statement by circling the appropriate number. The degree of agreement was ascertained by assigning a numerical score to each of the possible responses such that a low score was indicative of a high degree of agreement.

For example:

AS MY PARENT(S) GROW
OLDER, I EXPECT THEM
TO EXPERIENCE:

1	2	3	4	5	pain and stiffness of joints
---	---	---	---	---	------------------------------

1 = strongly agree; 2 = agree; 3 = neutral;
4 = disagree; 5 = strongly disagree.

Subjects received one score which was indicative of their degree of agreement as to whether or not their parent(s) would experience a specific health need as they grow older. Perceived health needs (total) were further categorized into perceived physical health needs, perceived psychological health needs, and perceived socioeconomic health needs.

Perceived physical health needs were defined as future changes in locomotion, nutrition, aeration, elimination,

circulation, sensation, and rest that the adult child expected his/her parent(s) to experience as they grow older. A total of 27 items were used to measure this variable. In columns 1 and 2 of Part A of the questionnaire (Appendix C), items 1-11, 22-30, 38-44 refer to physical health needs.

Perceived psychological health needs were defined as future changes in individual roles, intimacy, family relationships, self-esteem, memory, desire to reminisce, ability to learn, and problem solving ability that the adult child expects his/her parent(s) to experience as they grow older. A total of 13 items were used to measure this variable. In columns 1 and 2 of Part A of the questionnaire (Appendix C), items 12-15, 31-35, 46-48, 51 refer to psychological health needs.

Perceived socioeconomic health needs were defined as future changes in ability to afford food, housing, clothing, utilities, health care, social activities, and social roles that the adult child expects his/her parent(s) to experience as they grow older. A total of 11 items were used to measure this variable. In Columns 1 and 2 of Part A of the questionnaire (Appendix C), items 16-21, 36, 37, 45, 49, 50 refer to socioeconomic health needs.

Perceived health assistance (total)

Perceived health assistance (total) was measured by the use of 51 questions (Part A, Columns 2 and 3 of the questionnaire, Appendix C) concerning the extent to which the adult child expects his/her parent(s) will need help with a specific health need as the parent(s) grow older.

Perceived health assistance was measured in the same response format as perceived health needs. Perceived health assistance (total) was further categorized into perceived health assistance for physical health needs, perceived health assistance for psychological health needs, and perceived health assistance for socioeconomic health needs.

Perceived health assistance for physical health needs

was defined as the extent of health assistance that the adult child expects his/her parent(s) will need help with a specific physical health need as they grow older. A total of 27 items were used to measure this variable. In Columns 2 and 3 of Part A of the questionnaire (Appendix C), items 1-11, 22-30, 38-44 refer to physical health needs.

Perceived health assistance for psychological health needs

was defined as the extent of health assistance that the adult child expects his/her parent(s) will need as they grow older. A total of 13 items were used to measure this variable. In Columns 2 and 3 of

Part A of the questionnaire (Appendix C), items 12-15, 31-35, 46-48, 51 refer to psychological health needs.

Perceived health assistance for socioeconomic health needs was defined as the extent of health assistance that the adult child expects his/her parent(s) will need help with a specific socioeconomic health need as they grow older. A total of 11 items were used to measure this variable. In Columns 2 and 3 of Part A of the questionnaire (Appendix C), items 16-21, 36, 37, 45, 49, 50 refer to socioeconomic health needs.

Perceived providers of health assistance

Perceived providers of health assistance were defined as those persons most likely to provide health assistance to aged parents for their physical, psychological, and socioeconomic health needs as perceived by their adult children. Providers of health assistance were dichotomized into two groups:

Providers of health assistance within the primary group were: friend/neighbor of my parent(s), one of my brothers or sisters, myself, spouse of my parent(s); relatives of my parent(s);

Providers of health assistance within the secondary group were: social worker, counselor, physician/dentist, professional nurse, community/government worker.

Two additional provider choices were listed: "other" (the participant was asked to specify by writing in the space provided) and "No One/No Helper Needed."

After the adult child participant agreed or disagreed that his/her parent(s) would experience a health need and stated whether or not health assistance is expected, the participant was asked to choose the person most likely to help by writing in the appropriate letter in the space provided in column 4 of the questionnaire, Part A (Appendix C).

Descriptive information regarding perceived providers of health assistance was obtained by indexing or counting the number of times a category or provider was mentioned in each of the four scales of health needs (physical, psychological, socioeconomic, total). The scoring technique used to summarize this information is discussed in Chapter V (Data Analysis). Data on five categories of perceived providers of health assistance were reported for each health need (physical, psychological, socioeconomic, total). Categories of providers used to report data include:

- (1) providers of health assistance within the primary group, excluding the "myself" (adult child participant) category;
- (2) providers of health assistance within the secondary group, excluding "professional nurse" category;
- (3) no one/no helper needed;

- (4) professional nurse;
- (5) myself (adult child participant).

Descriptive variables concerning the adult child and aged parents

Questions pertaining to sociodemographic characteristics and other descriptors of the adult child and his/her parent(s) are located in Part C of the questionnaire (Appendix C). Most of the questions required a check mark, others required the participant to write in information. Questions used to describe the adult child and his/her parent(s) are summarized in Table 2.

Procedures for Data Analysis

Descriptive statistics were utilized to describe phenomena occurring naturally in the environment. Frequency distributions and percentages were based on the number of adult children who responded to the particular question and are reported for each major study variable: perceived health needs, perceived health assistance, and perceived providers of health assistance. Specific statistical techniques used to elicit data for each research question are discussed in Chapter V.

A sample mean was calculated for each scale utilized in the study: perceived health needs (total), perceived

Table 2. Sociodemographic and Other Descriptive Variables
Used to Describe Adult Children and Their Parents.

Variables Concerning the Adult Child
Participant

Demographic variables

- age
- sex
- marital status
- racial or ethnic background
- education
- occupation
- income level

Other descriptive variables

- number and ages of children
- difficulty living on present income
- sibling rank in family of origin
- education and occupation of spouse
- present health status
- health of household members

Variables Concerning Aged Parents

Demographic variables

- number of living parents
- age of parents
- estimated number of miles from parents

Other descriptive variables

- parents' difficulty living on
income
- usual type and frequency of
contact
- present health status

physical health needs, perceived psychological health needs, perceived socioeconomic health needs, perceived health assistance (total), perceived health assistance for physical health needs, perceived health assistance for psychological health needs, perceived health assistance for socioeconomic health needs. The sample mean was used in this study as a summary measure of the sample scores.

To determine the proportion a particular provider category was mentioned in each health needs scale (physical, psychological, socioeconomic, total), an index was calculated for each participant. To measure central tendency, a mean proportion, expressed as a percent, was calculated for each of the health needs scales. The statistical technique utilized to calculate the mean proportion (percent) was presented in Chapter V (Data Analysis).

The Pearson Product Moment correlational technique was utilized to evaluate the relationship between selected sociodemographic variables concerning the adult child participant (age, sex, education, income, and geographic distance from parent(s)) and each of the eight scales used in the study. Although it was beyond the scope of this study to correlate study variables with all other variables, correlational data are presented in Chapter V (Data Analysis) as "additional findings regarding the study sample". Correlation was used in this study to demonstrate functional rather than causal relationships among selected sociodemographic variables.

rig

of

the

Sub

app

of

a c

ass

rece

dat

ana

in t

deta

inst

desc

her

right

chil

Protection of Human Rights

Specific procedures were followed to assure that the rights of study participants were not violated. Approval of the human rights protection procedures was granted by the Michigan State University College of Nursing Human Subjects Review Committee on April 29, 1982.

A letter explaining the research study and goals, the approximate time involved in participation and assurances of anonymity was provided to each participant along with a consent form (Appendix C). An identification number was assigned to each questionnaire by the investigator upon receiving the questionnaire to avoid further identifying data. Data were transcribed in aggregate form for computer analysis.

Summary

A discussion of the methodology and procedures utilized in this research study was presented in Chapter IV. A detailed discussion of the sample, data collection procedures, instrumentation, operationalization of the study variables, descriptive variables concerning the adult child and his/her aged parent(s), procedures for data analysis and human rights procedures was presented.

In Chapter V, data describing the sample of adult children utilized in this research study and data pertaining

to each research question were presented. Reliabilities of each scale and additional findings were also presented in Chapter V.

and

nee

of

gro

fin

var

var

chi

cri

chi

pla

dat

sea

Fol

to

the

in t

CHAPTER V

DATA PRESENTATION AND ANALYSIS

Overview

Data presented in this chapter describe the study sample and the perceptions of adult children concerning the health needs, expectations of health assistance, and providers of health assistance for their parents as their parents grow older. For organizational purposes, descriptive findings of the study sample will be dichotomized into: variables concerning the adult child participant and variables concerning the aged parent(s) of the adult child participant. Demographic variables and other descriptive variables will be discussed for both the adult child participant and the aged parent(s).

Following the section on the study sample, a brief explanation of the statistical analysis utilized to obtain data for the research questions is presented. Each research sub-question with its associated data is discussed. Following this discussion, descriptive findings related to the major research question are addressed. Finally, the reliabilities of the scales and sub-scales utilized in the present study are discussed.

Descriptive Findings of the Study Sample

Variables concerning the adult child participant

Demographic variables

The demographic variables utilized in the present study to describe the adult child participant were: age, sex, marital status, racial or ethnic background, education, occupation and income level. The frequency distributions and percent of those adult children responding to these variables is presented in Table 3.

Age. The age of the adult child participants ranged from 31 to 62 years. The mean age was 42.6 years.

Sex. Both males and females participated in the study. Two-fifths of the study sample were males and three-fifths females.

Marital Status. The majority of adult child participants were married. Nearly fifteen percent were either single, never married, divorced, or widowed.

Racial or Ethnic Background. All of the adult child participants were white.

Education. The highest grade completed was obtained from each participant and his/her spouse. In general, the majority of adult child participants (87.1%, $n = 41$) and their spouses (80.0%, $n = 39$) had post-high school

Table 3. Demographic Variables Concerning the Adult Child Respondent (age, sex, marital status, racial or ethnic background, education, occupation, income level) (N = 47).

Variable	Number of Respondents	Percent
Age in years		
30-39	20	43.5
40-49	14	30.4
50-59	11	23.8
60-64	1	2.2
Sex		
Male	19	40.4
Female	28	59.6
Marital Status		
Married	40	85.1
Single, never married	1	2.1
Separated	0	0
Divorced	5	10.6
Widowed	1	2.1
Racial or Ethnic Background		
White	47	100.0
Black	0	0
American Indian	0	0
Hispanic	0	0
Oriental	0	0
Other	0	0
Income Level (in Dollars)		
Less than 5,000	0	0
5,000 to 9,999	0	0
10,000 to 14,999	1	2.4
15,000 to 19,999	2	4.9
20,000 to 24,999	7	17.1
25,000 to 29,999	3	7.3
30,000 to 34,999	3	7.3
35,000 to 39,999	8	19.5
40,000 or over	17	41.5

Table 3. Continued.

Variable	Number of Respondents	Percent
Education		
None or some Grammer school (up to 6th grade)	0	0
Junior High School (7-9th Grade)	0	0
Some High School (10-12th Grade)	2	4.3
Graduated High School, Technical, Business, or Trade School	4	8.5
Some College (Less than 4 years completed)	8	17.0
Associate Degree Completed	1	2.1
Graduated College (4 years completed)	8	17.0
Post Graduate or Professional	16	34.0
Occupation		
Higher Executives, Proprietors of large concerns, major professionals	7	19.4
Business Managers, Proprietors of medium sized businesses, and lesser professionals	14	38.9
Administrative Personnel, small independent businesses, and minor professionals	4	11.1
Clerical and sales workers, technicians, and owners of little businesses	7	19.4
Skilled manual employees	3	8.3
Machine operators and semi-skilled employees	1	2.8
Unskilled employees	0	0

V
P
P
a
n
E
n
s

e
s
i
t
i
g
s

education. Of those adult child participants who completed four years of college, 34.0% ($\underline{n} = 16$) achieved post graduate or professional level. Of those spouses who completed four years of college, 20.0% ($\underline{n} = 8$) had achieved post graduate or professional level.

Occupation. Participants were asked to indicate their main occupation, whether or not they were working at a regular job, and whether or not it was full-time or part-time. Three-quarters of the adult child participants were working at a regular job and the majority were working full-time. Of the spouses, 64.4% ($\underline{n} = 29$) were employed full-time at a regular job. Nearly 70% of the adult child participants were either executives, business managers or proprietors, administrative personnel, or professional; 30% were clerical or sales workers, technicians, owners of small businesses or skilled/semi-skilled employees.

Income Level. Income level was determined by asking each participant to take all sources of money into consideration and estimate the amount of their family's combined income before taxes and other deductions in 1981. Of the adult children who responded, nearly 40% had annual income levels below \$35,000 while 60% had income levels greater than \$35,000. The mean income level was between \$30,000 to \$34,000.

Other descriptive variables

Other variables used to describe the sample of adult children include: number of children, how difficult it is to live on their present income, sibling rank in their family of origin, and their present health and health of household members. The frequency distributions and percentages of adult children who responded to these variables can be seen in Table 4 and Table 5.

Number of children of adult child participant. The number and ages of children, including adopted and step-children were asked of each adult child participant. Of those with children, 97.7% ($\underline{n} = 45$) had one to six children. The mean number of offspring was 2.7 ranging in age from 1 to 44 years. Of those with children, 71.1% ($\underline{n} = 32$) had children under eighteen years of age.

Difficulty living on income. One-quarter of adult child participants reported they experienced some difficulty living on their present income. Three-quarters of the participants stated they had little or no difficulty living on their present income.

Sibling rank in family of origin. Almost two-fifths (38.2, $\underline{n} = 18$) of study subjects were the "youngest child." There were approximately the same number of "oldest child" and "middle child" responses. The category "only child" had the smallest number of responses.

Table 4. Descriptive Variables Concerning the Adult Child Respondent (difficulty living on present income, sibling rank in family of origin) (N = 47).

Variable	Number of Respondents	Percent
Difficulty Living on Present Income		
Very difficult	0	0
Fairly Difficult	0	0
Somewhat Difficult	11	25.0
Not too Difficult	16	36.4
No Difficulty at all	17	38.6
Sibling Rank in Family of Origin		
Youngest Child	18	38.2
Oldest Child	13	27.7
Only Child	5	10.6
A Middle Child	11	23.4

Table 5. Descriptive Variables Concerning the Health of the Adult Child Respondents (N=47) and Household Members (description of health, presence of chronic health problems, and health problems experienced).

Variable	Adult Child Respondents		Household Members	
	Number of Respondents	%	Number of Respondents	%
Health Described As:				
Excellent	30	63.8	--	----
Good	13	27.7	--	----
Fair	3	6.4	--	----
Poor	1	2.1	--	----
Presence of Chronic Health Problems				
Yes	13	27.7	10	22.2
No	34	72.3	35	77.8
Health Problems Experienced:				
Respiratory	4	12.9	2	14.3
Cardiovascular	4	12.9	3	23.1
Bones and Joints	4	12.9	2	15.4
Endocrine (includes D.M.)	1	3.2	1	7.7
GU/GI	0	0	1	7.7
Neuro/Mental	1	3.2	1	7.7
Skin/EENT	0	0	1	7.7
Metabolic (includes weight, cancer, alcoholism)	1	3.2	3	23.1

Health of the adult child. Participants were asked to describe their health, state whether or not they had chronic health problems, and what health problems they experienced. A majority of adult child participants described their health as excellent or good, while less than ten percent described their health as fair or poor. Slightly less than one-third of adult child participants experienced chronic health problems. Of these chronic health problems, respiratory, cardiovascular, and bones and joints problems were experienced most frequently.

Health of household members. Each adult child participant was asked if household members experienced chronic health problems, how many persons, and what health problems were experienced. Slightly over one-fifth of the participants stated that household members experienced chronic health problems. The mean number of household members who had chronic health problems was 1.1 ($\underline{n} = 11$). Cardiovascular problems were the most frequently reported chronic health problem followed by respiratory and bones and joints problems.

Variables concerning the aged parent(s) of the adult child participant

Demographic variables

The demographic variables utilized in the present study were: number of living parents, age of parents, and

C
C
S
W
S
E
t
r
f
r
n
n
c
t
y
f
c
p
t
r
w
m
p

estimated number of miles from parents. The frequency distributions and percentages of adult children who responded to these variables can be seen in Table 6.

Number of living parents. Adult child participants were asked if their mother and father were living. Slightly less than half of the adult child participants had one living parent, the remaining adult child participants had two living parents. Of the living parents, nearly 90% ($\underline{n} = 42$) were mothers; nearly 70% ($\underline{n} = 31$) were fathers.

Of the married adult child participants, the total number of living parents per couple averaged 2.8, the mode 3. Approximately one-third of the couples had one or two living parents, two-thirds of the couples had three or four living parents.

Age of parents. The age of mothers ranged from 61 years to 84 years with a mean of 72.8 years. The age of fathers ranged from 65 years to 81 years with a mean age of 73.4.

Estimated number of miles from parents. Adult child participants were asked to estimate the number of miles they lived from their parent(s) home. The number of miles ranged from 1 to 6,000 miles. The mean number of miles was 2716.77 miles, the mode 1500 miles, the median 200 miles. Slightly more than 60% ($\underline{n}=29$) of the adult child participants lived less than 500 miles from their parents.

Table 6. Demographic Variables Concerning the Parents of Adult Children (N=47) (number of living parents, age of parents, estimated number of miles from parents).

Variable	Number of Respondents	Percent
Number of Living Parents (<u>N</u> =74)		
Per Adult Child Participant		
1 parent	20	42.6
2 parents	27	57.4
Per Married Adult Child Participant, Including Parent(s) of Spouse		
1 parent	6	14.3
2 parents	8	19.0
3 parents	16	38.1
4 parents	12	28.6
Age of Parent(s) in Years		
Mother		
60-69	14	33.5
70-79	20	47.8
80-89	8	19.2
Father		
60-69	6	19.4
70-79	22	71.2
80-89	3	9.7
Estimated Number of Miles From Parents		
10 miles or less	9	19.2
10-50 miles	4	8.4
50-100 miles	7	14.9
100-500 miles	9	19.0
500-1000 miles	4	8.4
1000-2000 miles	11	23.3
2000-6000 miles	2	4.2

Other descriptive variables

Each adult child participant was asked how difficult it was for his/her parent(s) to live on their present income and the usual type and frequency of contact the adult child had with his/her parent(s). Participants were asked to describe their parents' health, state if chronic health problems were present and what health problems their parents experienced. Frequency distributions and percentages of those who responded to these questions can be seen in Table 7 and Table 8.

Parents difficulty living on present income. Slightly more than 70% (n=34) of the adult child participants reported their parents had little or no difficulty living on their present income. Nearly thirty percent (n=13) reported their parents had some difficulty.

Usual type and frequency of contact with parents. All of the adult children sampled maintained telephone contact with their parents and nearly all of the adult children visited their parents. Three-quarters stated they usually corresponded by letter/mail. The frequency of contact reported for contact by telephone and letter/mail most often was "once a month." Adult children reported visiting their parents "about 3-4 times a year."

Table 7. Descriptive Variables Concerning the Parents (N=74) of Adult Children (parents' difficulty living on income, usual type and frequency of contact with parents).

Variable	Number of Participants	Percent
Parents' Difficulty Living on Present Income:		
Very difficult	1	2.1
Fairly difficult	1	2.1
Somewhat difficult	11	23.4
Not too difficult	10	21.3
No difficulty at all	24	51.1
Usual Type and Frequency of Contact		
Telephone	47	100
Nearly every day	11	23.9
About every week	13	27.7
About once a month	17	36.2
About 3-4 times a year	4	8.5
About once a year	2	4.3
Never	0	0
Letter/Mail	35	76.1
Nearly every day	0	0
About every week	7	15.2
About once a month	13	28.3
About 3-4 times a year	6	13.0
About once a year	4	8.7
Never	6	13.3
Visiting	44	93.6
Nearly every day	3	6.4
About every week	11	23.4
About once a month	10	21.3
About 3-4 times a year	15	31.9
About once a year	6	12.8
Never	0	0

Table 8. Descriptive Variables Concerning Health of Parents ($N=74$) of Adult Children (description of health, presence of chronic health problems, and health problems experienced by parents).

Variable	<u>Mother of Adult Child Participant</u>		<u>Father of Adult Child Participant</u>	
	Number of Respondents	%	Number of Respondents	%
Health Described As:				
Excellent	13	31.0	9	29.0
Good	17	40.5	17	54.8
Fair	9	21.4	5	16.1
Poor	3	7.1	0	0
Presence of Chronic Health Problems				
Yes	29	69.0	17	56.7
No	13	31.0	13	43.3
Health Problems Experienced				
Respiratory	0	0	3	10.0
Cardiovascular	15	36.6	7	22.6
Bones and Joints	16	39.0	9	29.0
Endocrine (includes D.M.)	2	4.9	0	0
GU/GI	3	7.3	2	6.5
Neuro/Mental	1	2.4	2	6.5
Skin/EENT	6	14.6	2	6.5
Metabolic (includes weight, cancer, alcoholism)	6	14.6	2	6.5

Health of mother of adult child participant. Participants were asked to describe their mother's health, state whether or not she had chronic health problems, and what health problems she experienced. Nearly 70% ($n=30$) of the adult child participants described their mother's health as excellent or good, while nearly 30% ($n=12$) described their mother's health as fair or poor. Chronic problems of the mother were reported by nearly 70% ($n=29$) of the adult children of which bones and joints and cardiovascular problems were the most frequently reported type of problem.

Health of father of adult child participant. The same questions concerning the mother's health were asked about the father of the adult child participant. Slightly more than 80% ($n=26$) of adult children described their father's health as excellent or good. Chronic health problems of the father were reported by slightly more than 55% ($n=17$) of the adult children of which bones and joints, cardiovascular, and respiratory problems were the most frequently reported type of problem.

Additional Findings Regarding the Study Sample

The Pearson Product Moment correlations were utilized to calculate the degree and direction of the relationship between selected sociodemographic variables concerning

the adult child participant (age, sex, education, income, and geographic distance from parents) and each scale utilized in this study. The correlation matrix is presented in Table 9. Correlation coefficients (r) range from -1.00 to 1.00. A minus (-) sign preceding the correlation coefficient indicates that as scores on one variable increase, scores on the other variable tend to decrease (a negative correlation). When a minus sign is not present the relationship is positive indicating that when scores on one variable increase, the scores on the other variable tend to increase. The magnitude of the relationship is also indicated by the absolute value of the correlation coefficient (r). Correlations were interpreted as

value of (r)	strength of relationship
0.00 to 0.20	no meaningful relationship
0.20 to 0.35	very slight
0.35 to 0.65	moderate to fair
0.65 to 0.85	marked to fairly high
0.85 to 1.00	high to very high

(Borg and Gall, 1979)

Correlation coefficients can be tested for statistical significance. The minimum level of significance considered acceptable was the .05 level. The following statements summarize the statistically significant correlations that are depicted in Table 9 and Table 10.

1. There is a slight negative relationship between age of the adult child and the socioeconomic health needs scale.

Table 9. Correlation Matrix: Relationship Between Selected Sociodemographic Variables Concerning the Adult Child Respondent and Each Scale Utilized in the Present Study.

Scale	Age	Sex		Education	Income	Geographic Distance From Parents
		1 M	2 F			
Physical Health Needs Scale	-.1651	-.2713*	-.1208	-.1335	-.0583	
Psychological Health Needs Scale	-.0673	-.0568	-.0369	-.0777	.0678	
Socioeconomic Health Needs Scale	-.3049*	-.3342*	.1736	-.1000	.0838	
Total Health Needs Scale	-.2099	-.2785*	-.0044	-.1349	.0288	
Health Assistance for Physical Health Needs Scale	-.1796	-.3661**	.2227	-.0033	-.0339	
Health Assistance for Psychological Health Needs Scale	-.0627	-.1609	.1764	.0180	.0224	
Health Assistance for Socio-economic Health Needs Scale	-.4067**	-.3298*	.3916**	.0752	.0864	
Total Health Assistance Scale	-.2505*	-.3661**	.2972*	.0058	.0223	

* = significant at the .05 level.

** = significant at the <.01 level.

Table 10. Summary of Statistically Significant Correlations Between Selected Sociodemographic Variables Concerning the Adult Child Respondent and Each Scale Utilized in the Present Study.

Statistically Significant Correlation Between Variables and Scale	Direction of Relationship	Magnitude of Relationship
age and perceived socioeconomic health needs sub-scale	negative	slight
age and perceived health assistance for socio- economic health needs sub-scale	negative	moderate to fair
age and perceived total health assistance scale	negative	slight
sex and perceived physical health needs sub-scale	negative	slight
sex and perceived socioeconomic health needs sub-scale	negative	slight
sex and perceived total health needs scale	negative	slight
sex and perceived health assistance for physical health needs sub-scale	negative	moderate to fair
sex and perceived health assistance for socio- economic health needs sub-scale	negative	slight
sex and perceived total health assistance scale	negative	moderate to fair
education and perceived health assistance for socioeconomic health needs sub-scale	positive	moderate to fair
education and perceived total health assistance scale	positive	slight

A correlation of $-.30$ ($p \leq .05$) was obtained between age of the adult child participant and the socioeconomic health needs scale. The older the adult child, the lower the scores on the socioeconomic health needs scale. The younger the adult child, the higher the scores on the socioeconomic scale.

2. There was a moderate to fair negative relationship between age of the adult child and health assistance for socioeconomic health needs scale.

A correlation coefficient of $-.41$ ($p = < .01$) was obtained between age of the adult child and health assistance for socioeconomic health needs scale. The older the adult child, the lower the scores on the health assistance for socioeconomic health needs scale. The younger the adult child, the higher the scores.

3. There was a slight negative relationship between age of the adult child and the total health assistance scale.

There was a correlation of $r = -.25$ ($p = < .05$) between age of the adult child and the total health assistance scale. The older the adult child, the lower the scores on the total health assistance scale. The younger the adult child, the higher the scores.

4. There is a slight negative relationship between the sex of the adult child participant and the physical health needs scale.

There was a correlation of $r = -.27$ ($p = < .05$) between sex of the adult child and the physical health needs scale. Since males were coded as 1 and females coded as 2, the relationship between these two variables is such that males tend to have higher scores on the physical health needs scale than females.

5. There is a slight negative relationship between sex of the adult child and the socioeconomic health needs scale.

There was a correlation of $r = -.33$ ($p = < .05$) between sex of the adult child and the socioeconomic health needs scale. Since males were coded as 1 and females coded as 2, the relationship between these two variables is such that males tend to have higher scores on the socioeconomic health needs scale than females.

6. There is a slight negative relationship between sex of the adult child and the total health needs scale.

A correlation coefficient of $-.28$ ($p = < .05$) was obtained between sex of the adult child and the total health needs scale. Since males were coded as 1 and females coded as 2, the relationship between these two variables is such that males tend to have over-all higher scores on the total health needs scale than females.

7. There is a moderate to fair negative relationship between sex of the adult child and the health assistance for physical health needs scale.

There was a correlation of $r = -.37$ ($p = <.01$) between sex of the adult child and the health assistance for physical health needs scale. Since males were coded as 1 and females coded as 2, the relationship between these two variables is such that males tend to have higher scores on the health assistance for physical health needs scale than females.

8. There was a slight negative relationship between sex of the adult child and health assistance for socioeconomic health needs scale.

There was a correlation of $r = -.33$ ($p = <.05$) between sex of the adult child and health assistance for socioeconomic health needs scale. Since males were coded as 1 and females coded as 2, the relationship between these two variables is such that males tend to have higher scores on health assistance for socioeconomic health needs than females.

9. There is a moderate to fair negative relationship between sex of the adult child and the total health assistance scale.

A correlation coefficient of $-.37$ ($p = <.01$) was obtained between sex of the adult child and the total health assistance scale. Since males were coded as 1 and females

coded as 2, the relationship between these two variables is such that males tend to have higher scores on the total health assistance scale.

10. There was a moderate to fair positive relationship between education of the adult child and health assistance for socioeconomic health needs scale.

A correlation coefficient of .39 ($p = <.01$) was obtained between education of the adult child and health assistance for socioeconomic health needs scale. The more educated the adult child, the higher the scores on health assistance for socioeconomic health needs scale.

11. There is a slight positive relationship between education and the total health assistance scale.

A correlation coefficient of .30 ($p = <.05$) was computed between education of the adult child and total health assistance scale. The more educated the adult child, the higher the scores on total health assistance scale.

Summary

The descriptive findings of the study sample were presented in this section. The specific descriptors of the sample were organized into two major areas: variables concerning the adult child participant and variables concerning the aged parent(s) of the adult child participant.

Additional findings were presented in this section. Selected sociodemographic variables (age, sex, education, income, and geographic distance from parents) were correlated with each of the scales used in this study. Descriptive data for each research question is presented in the next section.

Data Presentation for Research Questions

In this section each research question will be presented with its associated data. First, each research sub-question is presented followed by the major research question near the end of the chapter. A brief explanation of the statistical techniques utilized to analyze data is addressed initially. Additional statistical techniques utilized to evaluate specific data are discussed under the appropriate research question. Following the presentation of each research question, the reliabilities of the instrument are addressed. The chapter concludes with a summary of data analysis.

Statistical technique for analyzing data

To obtain descriptive information regarding perceptions of adult children, frequency distributions were calculated for each scale used to measure perceived health needs, perceived health assistance, and perceived providers of

health assistance. Data are presented as percentages of the total number of responses to each item along with the number of participants responding to each item. For reporting purposes, the responses "strongly agree" and "agree" were collapsed into one "agree" category.

A sample mean was calculated for each scale. The standard deviation was computed to measure the extent to which the distribution of mean scores vary about the sample mean. The Likert method of summed ratings was used to indicate the level of agreement or disagreement with items of each scale. Scores were coded using the following numerical scale: 1 = strongly agree; 2 = agree; 3 = neutral; 4 = disagree; 5 = strongly disagree. The standard deviation, like the sample mean, provides a way of describing the central tendency of the scores from the sample on the basis of a single measure.

Research sub-question 1

What are the physical, psychological, and socioeconomic health needs of aged parents as perceived by their adult children as their parents grow older?

Perceived physical health needs. The percentage and number of adult children who expected their parents to experience physical health needs as they grow older can be seen in Table 11. More than 50% ($n=23$) of adult child

Table 11. Percent and Number of Adult Children Who Identified Physical, Psychological, and Socio-economic Health Needs of Their Parents (in descending order) (N=47).

Perceived Health Needs of Parents	Number of Respondents	Percent
<u>Physical Health Needs</u> (27 items)		
Pain and stiffness in joints	44	97.7
Visual changes	44	95.7
A longer time to recover from illness	42	93.3
Daytime tiredness	38	82.6
Increased difficulty adapting to extreme changes in weather	36	78.2
Increased difficulty doing household tasks	36	76.6
A need to reduce their caloric intake	33	73.3
Increasing deafness	30	67.7
Symptoms of disease differently from a younger person	29	64.4
Cold hands and feet	30	63.9
Brief awakenings during the night	27	63.0
More days when they don't do their usual activities	27	60.0
Changes in their daily routines	26	56.5
Safety problems at home		
Chronic health problems		

Table 11. Continued.

Perceived Health Needs of Parents	Number of Respondents	Percent
Sleep loss	25	54.3
Shortness of breath	24	52.2
Constipation	23	51.1
Loss of balance	23	50.0
Problems with denture fit		
Swelling of hands and/or feet	22	48.9
A need to urinate more often	21	46.6
Numbness of hands and/or feet	19	41.3
A change in their ability to smell odors	16	35.5
More side effects from common medications	16	34.8
Inability to hold their urine	14	31.1
Difficulty chewing	12	26.1
<u>Psychological Health Needs</u> (13 items)		
Taking more time to perform routine activities	41	91.1
Some degree of forgetfulness	42	89.4
Increased need for family closeness	40	86.9

Table 11. Continued.

Perceived Health Needs of Parents	Number of Respondents	Percent
Desire to reminisce	38	80.8
Decreased ability to cope with situations	25	55.6
Changes in sexual and marital relations	24	52.1
Feelings of uselessness	23	50.0
Difficulty making up their mind	22	47.8
Difficulty thinking through problems	21	45.6
A decrease in their ability to learn new things	19	41.3
Difficulty in following any prescribed medication schedule	16	34.8
A need for parent-like guidance	13	30.3
More times when they will act like children	13	28.9
<u>Socioeconomic Health Needs</u> (11 items)		
Possible difficulty arranging for health care services	22	47.9
Decreased number of social contacts	21	45.7
Possible difficulty managing personal finances	19	41.3
Decreased interest in current events	13	28.8

Table 11. Continued.

Perceived Health Needs of Parents	Number of Respondents	Percent
Difficulty planning a balanced diet	12	26.7
Possible difficulty paying for health care services	11	23.9
Possible difficulty paying for utility bills	11	23.9
Possible difficulty in ability to purchase desired clothing	10	22.2
Possible difficulty paying for housing	8	17.4
Possible difficulty paying for food	7	15.2
Possible difficulty paying for social activities	6	13.1

participants expected their parents to experience 20 out of a possible 27 health needs as their parents grow older. More than 90% ($\underline{n}=42$) of adult child participants expected their parents to experience three physical health needs: pain and stiffness in joints, visual changes, and a longer time to recover from illness. Fewer than 40% ($\underline{n}=16$) expected their parents to experience: a change in their ability to smell odors, more side effects from medications, inability to hold their urine, and difficulty chewing.

The sample mean for perceived physical health needs scale is 2.49. The standard deviation is .37 (Table 12).

Perceived psychological health needs. The percent and number of adult children who expected their parents to experience psychological health needs as they grow older can be seen in Table 11. More than 50% ($\underline{n}=23$) adult child participants expected their parents to experience 7 out of a possible 13 psychological health needs as their parents grow older. Only one psychological health need was perceived by more than 90% ($\underline{n}=41$) adult child participants: taking more time to perform routine activities. Fewer than 40% ($\underline{n}=16$) expected their parents to experience: difficulty in following any prescribed medication schedule, a need for parent-like guidance, and more times when they will act like children.

The sample mean for perceived psychological health needs scale is 2.58. The standard deviation is .55 (Table 12).

Table 12. Sample Means and Standard Deviations for Scales Used to Measure Perceived Health Needs of Aged Parents (N=47).

Scale	Sample Mean	Standard Deviation
Physical health needs sub-scale	2.487	.374
Psychological health needs sub-scale	2.578	.554
Socioeconomic health needs sub-scale	3.375	.797
Health needs (total) scale	2.701	.438

Perceived socioeconomic health needs. The percent and number of adult children who expected their parents to experience socioeconomic health needs as they grow older can be seen in Table 11. No socioeconomic health needs were reported by 50% (n=22) or more of adult child participants. The most frequently reported socioeconomic health needs were: possible difficulty arranging for health care services, decreased number of social contacts, possible difficulty managing personal finances. Fewer than 20% (n=8) adult child participants expected their parents to experience: possible difficulty paying for housing, possible difficulty paying for food, and possible difficulty paying for social activities.

The sample mean for perceived socioeconomic health needs scale is 3.38. The standard deviation is .80 (Table 12).

Perceived health needs (total). More than 90% of the adult child participants expected their parents to experience physical and psychological health needs, while less than 50% expected their parents to experience socioeconomic health needs as their parents grow older. The five most frequently reported health needs were: pain and stiffness in joints, visual changes, a longer time to recover from illness, taking more time to perform routine activities, and some degree of forgetfulness.

The sample mean for the total health needs scale is 2.70. The standard deviation is .44 (Table 12).

Research sub-question 2

What are the expectations of health assistance for aged parents as perceived by their adult children as their parents grow older?

Perceived health assistance for physical health needs.

The percent and number of adult children who expected health assistance for their parents' physical health needs as they grow older can be seen in Table 13. More than 50% (n=23) adult child participants expected health assistance for 7 out of a possible 27 physical health needs. The most

Table 13. Percent and Number of Adult Children Who Identified Health Assistance for Physical, Psychological, and Socioeconomic Health Needs of their Parents (in descending order) (N=47).

Perceived Health Assistance for Health Needs of Parents	Number of Respondents	Percent
<u>Physical Health Needs</u> (27 items)		
Visual changes	35	79.5
A longer time to recover from illness	35	77.7
Increased difficulty doing household tasks	32	72.7
Pain and stiffness in joints	29	64.5
Chronic health problems	27	61.4
Increasing deafness	27	60.0
Symptoms of disease differently from a younger person	23	53.5
Loss of balance		
Increased difficulty adapting } to extreme changes in weather	20	46.5
Swelling of hands and/or } feet	20	45.4
Problems with denture } fit	19	44.2
Safety problems at home		
Shortness of breath	17	37.8
More side effects from common medications	16	36.4

Table 13. Continued.

Perceived Health Assistance for Health Needs of Parents	Number of Respondents	Percent
More days when they don't do their usual activities	14	32.6
Numbness of hands and/or feet	13	28.9
Inability to hold their urine	12	27.9
Sleep loss	11	25.0
Cold hands and feet	11	23.9
Daytime tiredness }	10	23.2
Difficulty chewing }		
Constipation	10	22.2
Changes in their daily routines }	9	20.9
A change in their ability to smell odors }		
A need to reduce their calorie intake	8	17.8
Brief awakenings during the night	8	17.8
A need to urinate more often	5	11.1
<u>Psychological Health Needs</u> (13 items)		
Increased need for family closeness	29	63.0
Feelings of uselessness	23	54.8
Some degree of forgetfulness	21	45.6

Table 13. Continued.

Perceived Health Assistance for Health Needs of Parents	Number of Respondents	Percent
Decreased ability to copy with situations	19	45.2
Taking more time to perform routine activities	19	43.2
Desire to reminisce	19	41.3
Difficulty making up their mind	18	40.9
Difficulty thinking through problems		
Difficulty in following any prescribed medication schedule	14	31.7
A need for parent-like guidance	13	
A decrease in their ability to learn new things	9	20.4
More times when they will act like children	6	14.3
Changes in sexual and marital relations	5	11.1
<u>Socioeconomic Health Needs (11 items)</u>		
Possible difficulty arranging for health care services	20	45.5
Possible difficulty managing personal finances	19	43.2
Decreased number of social contacts	14	31.8
Difficulty planning a balanced diet	11	25.6

Table 13. Continued.

Perceived Health Assistance for Health Needs of Parents	Number of Respondents	Percent
Possible difficulty paying for health care services	10	22.2
Possible difficulty paying for utility bills		
Possible difficulty in ability to purchase desired clothing	9	20.5
Possible difficulty paying for housing	8	18.2
Possible difficulty paying for social activities	7	16.3
Possible difficulty paying for food	7	15.9
Decreased interest in current events	4	9.6

frequently reported physical health needs the adult child participant expected their parents to need health assistance were: visual changes, a longer time to recover from illness, and increased difficulty doing household tasks. Fewer than 20% ($\underline{n}=8$) adult child participants expected health assistance for: a change in their ability to smell odors, a need to reduce their calorie intake, brief awakenings during the night, and a need to urinate more often.

The sample mean for perceived health assistance for physical health needs scale is 2.81. The standard deviation is .37 (Table 14).

Perceived health assistance for psychological health needs. The percent and number of adult children who expected health assistance for their parents' psychological health needs as they grow older can be seen in Table 13. More than 50% ($\underline{n}=23$) adult child participants expected health assistance for two (out of 13 health needs) psychological health needs: increased need for family closeness, and feelings of uselessness. Fewer than 20% ($\underline{n}=6$) adult child participants expected health assistance for: more times when they will act like children, changes in sexual and marital relations.

The sample mean for perceived health assistance for psychological health needs scale is 2.91. The standard deviation is .48 (Table 14).

Table 14. Sample Means and Standard Deviation for Scales Used to Measure Perceived Health Assistance for Physical, Psychological, and Socioeconomic Health Needs of Aged Parents by Their Adult Children (N=47).

Scale	Sample Mean	Standard Deviation
Health assistance for physical health needs sub-scale	2.809	.367
Health assistance for psychological health needs sub-scale	2.909	.484
Health assistance for socioeconomic health needs sub-scale	3.290	.842
Health assistance (total) scale	2.956	.388

Perceived health assistance for socioeconomic health needs. The percent and number of adult children who expected health assistance for their parents' socioeconomic health needs as they grow older can be seen in Table 13. The most frequently reported socioeconomic health needs the adult child participant (less than 50%, n=20) expected their parents to need health assistance were: possible difficulty arranging for health care services, possible difficulty managing personal finances. Fewer than 20% (n=8) adult child participants expected health assistance for: possible difficulty paying for housing, possible difficulty paying for social activities, possible difficulty paying for food, decreased interest in current events.

The sample mean for perceived health assistance for socioeconomic health needs scale is 3.30. The standard deviation is .84 (Table 14).

Perceived health assistance (total). The percent and number of adult children who expected health assistance for their parents' total health needs can be seen in Table 13. The five most frequently reported health needs that the adult child participant expects health assistance are: visual changes, a longer time to recover from illness, increased difficulty doing household tasks, pain and stiffness in joints, increased need for family closeness.

The sample mean for perceived health assistance (total) scale is 2.96. The standard deviation is .39 (Table 14).

Research sub-question 3

Who is likely to provide health assistance to aged parents as perceived by their adult children as their parents grow older?

Statistical technique for analyzing perceived providers of health assistance

Descriptive information regarding persons most likely to help aged parents with health needs was obtained by calculating frequency distributions and percentages of those who responded and then grouping responses into five categories of providers relevant to this study:

- (1) providers of health assistance within the primary group, excluding the "myself" (adult child participant) category -- friend/neighbor of parent(s), one of the brothers or sisters of the adult child participant, the spouse of the parent(s), and relative of the parent(s);
- (2) providers of health assistance within the secondary group, excluding "professional nurse" category -- social worker, counselor, physician/dentist, community/government worker;
- (3) no one/no helper needed;
- (4) professional nurse;
- (5) "myself" (adult child participant).

The number of participants and percent of those who responded to items pertaining to physical, psychological, and socioeconomic health needs for each category of provider can be seen in Table 15. To simplify reporting of data, the investigator arbitrarily decided to report a minimum of three health needs (those with the highest percent response) within each category of provider are discussed in detail. All results for all needs are presented in Table 15.

To determine the proportion a particular provider category (primary, secondary, no one/no helper needed, professional nurse, and "myself") was mentioned in each scale (physical, psychological, socioeconomic, and total health need scale), an index was calculated for each

Table 15. Percent and Number of Adult Children Who Indicated a Category of Provider of Health Assistance for Health Needs of Their Parents (N=47).

Perceived Health Needs of Parents	Perceived Provider of Health Assistance					
	Primary Group Excl. "Myself"	Total Primary Group	Secondary Group Excl. Prof. Nurse	Prof. Nurse	Total Secondary Group	No one/ No Helper Needed
<u>Physical health needs</u>						
Increased difficulty doing household tasks	20(47.9)	11(23.9)	31(71.8)	0	0	5(10.9)
Safety problems at home	21(48.8)	6(14.0)	27(62.8)	0	0	14(32.6)
More days when they don't do their usual activities	15(35.8)	3(7.1)	18(42.9)	2(4.8)	0	22(52.4)
Increased difficulty adapting to extreme changes in weather	12(28.6)	3(7.1)	15(35.7)	3(7.1)	0	21(50.0)
Changes in their daily routines	12(27.2)	3(6.8)	15(34.0)	1(2.3)	0	28(63.6)
A longer time to recover from illness	12(27.2)	2(4.5)	14(31.7)	21(47.8)	1(2.3)	7(15.9)
A need to reduce their calorie intake	8(18.2)	3(6.8)	11(25.0)	7(15.9)	1(2.3)	23(52.3)
Loss of balance	6(13.7)	3(6.8)	9(20.9)	24(54.5)	1(2.3)	10(22.7)
Chronic health problems	6(13.2)	2(4.4)	8(17.6)	30(66.6)	1(2.2)	5(11.1)

Table 15. Continued.

Perceived Health Needs of Parents	Perceived Provider of Health Assistance						
	Primary Group Excl. "Myself"	"Myself"	Total Primary Group	Secondary Group		Total Secondary Group	No one/ No Helper Needed
				Prof.	Nurse		
Daytime tiredness	5(11.7)	2(4.7)	7(16.4)	5(11.6)	1(2.3)	6(13.9)	29(67.4)
Brief awakenings during the night	5(11.6)	2(4.7)	7(16.3)	4(9.3)	1(2.3)	5(11.6)	30(69.8)
Pain and stiffness in joints	6(13.6)	1(2.3)	7(15.9)	33(75.0)	1(2.3)	34(77.3)	3(6.8)
More side effects from common medications	3(7.0)	2(4.7)	5(11.7)	24(55.8)	2(4.7)	26(60.5)	11(25.6)
Sleep loss	6(9.0)	1(2.3)	7(11.3)	12(27.3)	1(2.3)	13(29.6)	24(54.5)
Increasing deafness	3(6.6)	2(4.4)	5(11.0)	25(55.5)	1(2.2)	26(57.7)	13(28.9)
Visual changes	3(6.6)	1(2.2)	4(8.8)	36(78.3)	1(2.2)	37(80.5)	2(4.3)
Symptoms of disease differently from a younger person	3(7.0)	0	3(7.0)	30(69.7)	1(2.3)	31(72.0)	8(18.6)
A change in their ability to smell odors	2(4.5)	1(2.3)	3(6.8)	8(18.6)	1(2.3)	9(20.9)	31(72.1)
Cold hands and feet	2(4.4)	1(2.2)	3(6.6)	17(37.0)	0	17(37.0)	25(54.3)

Table 15. Continued.

Perceived Health Needs of Parents	Perceived Provider of Health Assistance						
	Primary Group Excl. "Myself"	"Myself"	Total Primary Group	Secondary Group Excl. Prof.Nurse	Prof. Nurse	Total Secondary Group	No one/ No Helper Needed
Shortness of breath	2(4.4)	1(2.2)	3(6.6)	27(60.0)	1(2.2)	28(62.2)	14(31.1)
Difficulty chewing	2(4.7)	0	2(4.7)	24(55.8)	0	24(55.8)	16(37.2)
Inability to hold their urine	1(2.3)	1(2.3)	2(4.6)	20(46.5)	1(2.3)	21(48.8)	20(46.5)
Constipation	2(4.4)	0	2(4.4)	14(31.1)	2(4.4)	16(35.5)	24(53.3)
Numbness of hands and/or feet	2(4.4)	0	2(4.4)	29(64.4)	1(2.2)	30(66.6)	13(28.9)
Problems with denture fit	1(2.3)	0	1(2.3)	31(72.1)	0	31(72.1)	11(25.6)
Swelling of hands and/or feet	1(2.3)	0	1(2.3)	32(74.4)	1(2.3)	33(76.7)	9(20.9)
A need to urinate more often	0	0	0	11(25.0)	1(2.3)	12(27.3)	31(70.5)
<u>Psychological Health Needs</u>							
Increased need for family closeness	20(43.6)	17(37.0)	37(80.6)	2(4.3)	0	2(4.3)	7(15.2)
Desire to reminisce	23(50.0)	9(19.6)	32(69.6)	0	0	0	13(28.3)
Decreased ability to cope with situations	19(43.1)	11(25.0)	30(68.1)	3(6.8)	0	3(6.8)	10(27.7)

Table 15. Continued.

Perceived Health Needs of Parents	Perceived Provider of Health Assistance						
	Primary Group Excl. "Myself"	Myself"	Total Primary Group	Secondary Group Excl. Prof.Nurse	Prof. Nurse	Total Secondary Group	No one/ No Helper Needed
Difficulty thinking through problems	18(40.9)	11(25.0)	29(65.9)	0	0	0	15(34.1)
A need for parent-like guidance	13(32.5)	13(32.5)	26(65.0)	1(2.5)	0	1(2.5)	12(30.0)
Difficulty making up their mind	17(38.6)	8(18.2)	25(56.8)	0	0	0	19(43.2)
Feelings of uselessness	18(40.8)	7(15.9)	25(56.7)	5(11.4)	0	5(11.4)	13(29.5)
Difficulty in following any pre- scribed meciation schedule	19(42.1)	4(8.9)	23(51.0)	2(4.4)	2(4.4)	4(8.8)	16(35.6)
Some degree of forgetfulness	20(43.6)	6(13.0)	26(56.6)	3(6.5)	0	3(6.5)	7(37.0)
Taking more time to perform routine activities	14(32.5)	4(9.3)	18(41.8)	1(2.3)	0	1(2.3)	24(55.8)
More times when they will act like children	14(32.6)	3(7.0)	17(39.6)	2(4.6)	0	2(4.6)	24(55.8)
A decrease in their ability to learn new things	7(15.9)	4(9.1)	11(25.0)	2(4.6)	0	2(4.6)	30(60.2)
Changes in sexual and marital relation	3(6.8)	2(4.5)	5(11.3)	11(25.0)	0	11(25.0)	28(63.6)

Table 15. Continued.

Perceived Health Needs of Parents	Perceived Provider of Health Assistance						
	Primary Group Excl. "Myself"	"Myself"	Total Primary Group	Secondary Group Excl. Prof.Nurse	Prof. Nurse	Total Secondary Group	No one/ No Helper Needed
<u>Socioeconomic Health Needs</u>							
Possible difficulty managing personal finances	17(37.6)	14(31.1)	31(68.7)	0	0	0	12(26.7)
Possible difficulty arranging for health care services	17(37.7)	9(20.0)	26(57.7)	6(13.2)	0	6(13.2)	9(20.0)
Decreased number of social contacts	18	2(4.0)	20(44.4)	1(2.2)	0	1(2.2)	24(53.3)
Difficulty planning a balanced diet	12(27.9)	4(9.3)	16(37.2)	1(2.3)	1(2.3)	2(4.6)	24(55.8)
Possible difficulty paying for health care services	6(19.2)	8(17.8)	14(37.0)	5(11.1)	0	5(11.1)	25(55.6)
Possible difficulty paying for food	7(16.5)	9(20.0)	16(36.5)	2(4.6)	0	2(4.6)	26(59.1)
Possible difficulty paying for utility bills	8(17.6)	8(17.8)	16(35.4)	4(8.9)	0	4(8.9)	25(55.6)
Possible difficulty paying for housing	6(14.2)	9(20.2)	15(34.2)	3(6.8)	0	3(6.8)	26(59.1)

Table 15. Continued.

Perceived Health Needs of Parents	Perceived Provider of Health Assistance						
	Primary Group Excl. "Myself"	"Myself"	Total Primary Group	Secondary Group Excl. Prof.Nurse	Prof. Nurse	Total Secondary Group	No one/ No Helper Needed
Possible difficulty in ability to purchase desired clothing	7(15.4)	8(17.8)	15(33.2)	3(6.6)	0	3(6.6)	27(60.0)
Possible difficulty paying for social activities	5(11.9)	9(20.0)	14(31.9)	1(2.2)	0	1(2.2)	30(68.2)
Decreased interest in current events	4(9.2)	2(4.7)	6(13.9)	0	0	0	37(86.0)

participant who responded using the following proportion:

$$\frac{\text{total \# items of a particular provider category}}{\text{total \# of responses to items in a scale}}$$

For example, one participant may have selected primary providers for six items in the physical health needs scale. The same participant's total number of responses to the physical health needs scale was 26 out of a maximum of 27 items in the physical health needs scale. The proportion of primary providers mentioned by this participant in the physical health needs scale is:

$$\frac{6}{26} = 0.230$$

In other words, this participant selected primary providers for 23% of his/her parent(s)' physical health needs.

To measure central tendency, the mean proportion was calculated for each scale (physical, psychological, socio-economic, total health needs scale) by dividing the sum of the proportions by the number of proportions. The mean proportion for each scale was reported as percentages in order to facilitate the comparison of scales. The mean proportion percent for each scale is reported in Table 16.

Table 16. Mean Proportion (Percent) of Perceived Providers of Health Assistance Mentioned by Adult Children Within Each Health Need Scale.

Health Need Scale	Primary Group Excl. "Myself"	Primary Group "Myself"	Total Primary Group	Secondary Group Excl. Prof.Nurse	Prof. Nurse	Total Second. Group	No one/ No Helper Needed
Physical Health Need Scale	11.0	5.1	16.1	39.5	1.8	41.3	36.8
Psychological Health Need Scale	27.8	18.9	46.7	5.5	0.3	5.8	39.1
Socioeconomic Health Need Scale	15.7	18.6	32.3	4.8	0.2	5.0	53.4
Total Health Needs Scale	16.3	11.1	27.4	23.6	1.0	24.6	41.3

Results of perceived providers of health assistance

Perceived providers of health assistance for physical health needs.

(1) Providers of health assistance within the primary group. In Table 15 the number and percentage of adult children who mentioned the primary group of providers of health assistance for their parents' physical health needs are depicted. Within the primary group of providers of health assistance (excluding the category "myself"), the adult child expected his/her parent(s) to be helped with: safety problems at home, increased difficulty doing household tasks, and more days when they don't do their usual activities. Within the category "myself," the adult child expects to help his/her parent(s) with the same physical health needs with the addition of: increased difficulty adapting to extreme changes in weather. When these two provider categories were combined, the physical health needs were ranked the same.

No providers within the primary group were expected to help parents with "a need to urinate more often." The adult child him/herself did not expect to help his/her parent(s) with: symptoms of disease differently from a younger person, difficulty chewing, constipation, numbness of hands and/or feet, problems with denture fit, swelling of hands and/or feet, and a need to urinate more often.

With regard to all physical health needs, the proportion of physical health needs that the adult child expected primary group providers, excluding "myself" category, to help his/her parent(s) was 11.0% (Table 16). The proportion of physical health needs that the adult child selected "myself" category was 5.1%. Over all, the proportion of total primary group providers selected for all physical health needs was 16.1%.

(2) Providers of health assistance within the secondary group. In Table 15 the number and percent of adult children who mentioned the secondary group of providers of health assistance for their parents' physical health needs are depicted. Within the secondary group of providers of health assistance (excluding the category "professional nurse"), the adult child expected his/her parent(s) to be helped with: visual changes, pain and stiffness in joints, and swellings of hands and/or feet. These physical health needs ranked the same with the addition of the "professional nurse" category. The professional nurse was expected to help their parents with: more side effects from common medications and constipation.

No providers within the secondary group were expected to help parents with: increased difficulty doing household tasks, safety problems at home. The professional nurse was not expected to help with: increased difficulty doing household tasks, safety problems at home, more days

when they don't do their usual activities, increased difficulty adapting to extreme changes in weather, changes in their daily routines, cold hands and feet, difficulty chewing, denture fit.

With regard to all physical health needs, the proportion of physical health needs that the adult child expected secondary group providers, excluding the "professional nurse" category, to help with his/her parent(s) was 39.5% (Table 16). The proportion of physical health needs that the adult child selected "professional nurse" was 1.8%. Over all, the proportion of total secondary group providers selected for all physical health needs was 41.3%.

(3) No one/no helper needed. In Table 15 the number and percentage of adult children who mentioned no one/no helper needed for their parents' physical health needs are depicted. Within this category, the adult child expected his/her parent(s) to need minimal help with: a change in their ability to smell odors, a need to urinate more often, brief awakenings during the night. Sixteen out of 27 physical health needs had 50% or less response as no help needed.

With regard to all physical health needs, the proportion of health needs that the adult child expected no help for his/her parent(s)' physical health needs was 36.8% (Table 16).

Perceived providers of health assistance for psychological health needs.

(1) Providers of health assistance within the primary group. In Table 15 the number and percentage of adult children who mentioned the primary group of providers of health assistance for their parents' psychological health needs are depicted. Within the primary group of providers of health assistance (excluding the category "myself"), the adult child expected his/her parent(s) to be helped with: desire to reminisce, some degree of forgetfulness, increased need for family closeness, decreased ability to cope with situations. Within the category "myself," the adult child expects to help his/her parent(s) with: increased need for family closeness, a need for parent-like guidance, decreased ability to cope with situations, difficulty thinking through problems. When these two primary provider categories were combined, the psychological health needs ranked as: increased need for family closeness, desire to reminisce, decreased ability to cope with situations. Five out of 13 psychological health needs had 50% or less response to the primary group of providers.

With regard to all psychological health needs, the proportion of psychological health needs that the adult child expected primary group providers, excluding "myself" category, to help his/her parent(s) was 27.8% (Table 16). The proportion of psychological health needs that the

adult child selected "myself" category was 18.9%. Over all, the proportion of total primary group providers selected for all psychological health needs was 46.7%.

(2) Providers of health assistance within the secondary group. In Table 15 the number and percent of adult children who mentioned the secondary group of providers of health assistance for their parents' psychological health needs are depicted. Within the secondary group of providers of health assistance (excluding the category "professional nurse"), the adult child expected his/her parent(s) to be helped with: changes in sexual and marital relations, feelings of uselessness, decreased ability to cope with situations. The professional nurse was expected to help with one psychological health need: difficulty in following any prescribed medication schedule.

When these two categories of secondary providers were combined, the psychological health needs were ranked as: changes in sexual and marital relations, feelings of uselessness, difficulty in following any prescribed medication schedule. No providers within the secondary group were expected to help parents with: desire to reminisce, difficulty thinking through problems, difficulty making up their minds.

With regard to all psychological health needs, the proportion of psychological health needs that the adult child expected secondary group providers, excluding the

"professional nurse" category, to help with his/her parent(s) was 5.5% (Table 16). The proportion of psychological health needs that the adult child selected "professional nurse" was 0.3%. Over all, the proportion of total secondary group providers selected for all psychological health needs was 5.8%.

(3) No one/no helper needed. In Table 15 the number and percentage of adult children who mentioned no one/no helper needed for their parents' psychological health needs are depicted. Within this category, the adult child expected his/her parent(s) to need minimal help with: a decrease in their ability to learn new things, changes in sexual and marital relations, more times when they will act like children, taking more time to perform routine activities.

With regard to all psychological health needs, the proportion of health needs that the adult child expected no help for his/her parent(s)' psychological health needs was 39.1% (Table 16).

Perceived Providers of Health Assistance for Socio-economic Health Needs

(1) Providers of health assistance within the primary group. In Table 15 the number and percentage of adult children who mentioned the primary group of providers of health assistance for their parents' socioeconomic health

needs are depicted. Within the group of providers of health assistance (excluding the category "myself"), the adult child expected his/her parent(s) to be helped with: decreased number of social contacts, possible difficulty arranging for health care services, possible difficulty managing personal finances. Within the category "myself," the adult child expects to help his/her parent(s) with: possible difficulty managing personal finances, possible difficulty paying for housing, possible difficulty arranging for health care services, possible difficulty paying for social activities. When these two primary provider categories were combined, the socioeconomic health needs ranked as: possible difficulty managing personal finances, possible difficulty arranging for health care services, possible difficulty paying for social activities. Eight out of 11 socioeconomic health needs had 50% or less response to the primary group of provider categories.

With regard to all socioeconomic health needs, the proportion of socioeconomic health needs that the adult child expected primary group providers, excluding "myself" category, to help his/her parent(s) was 15.7% (Table 16). The proportion of socioeconomic health needs that the adult child selected "myself" category was 16.6%. Over all, the proportion of total primary group providers selected for all socioeconomic health needs was 32.3%.

(2) Providers of health assistance within the secondary group. In Table 15 the number and percentage of adult children who mentioned the secondary group of providers of health assistance for their parents' socioeconomic health needs are depicted. Within the secondary group of providers of health assistance (excluding the category "professional nurse"), the adult child expected his/her parent(s) to be helped with: possible difficulty arranging for health care services, possible difficulty paying for health care services, possible difficulty paying for utility bills. These socioeconomic health needs ranked the same with the addition of "professional nurse" category. The professional nurse was expected to help one socioeconomic health need: difficulty planning a balanced diet. No providers within the secondary group were expected to help parents with: possible difficulty managing personal finances, decreased interest in current events.

With regard to all socioeconomic health needs, the proportion of socioeconomic health needs that the adult child expected secondary group providers, excluding the "professional nurse" category, to help with his/her parent(s) was 4.8% (Table 16). The proportion of socioeconomic health needs on which the adult child selected "professional nurse" was 0.2%. Over all, the proportion of total secondary group providers selected for all psychological health needs was 5.0%.

(3) No one/no helper needed. In Table 15 the number and percentage of adult children who mentioned no one/no helper needed for their parents' socioeconomic health needs are depicted. Within this category, the adult child expected his/her parent(s) to need minimal help with: decreased interest in current events, possible difficulty paying for social activities, possible difficulty in ability to purchase desired clothing. Nine out of 11 socioeconomic health needs had 50% or more response as no help needed.

With regard to all socioeconomic health needs, the proportion of health needs that the adult child expected to help for his/her parent(s)' socioeconomic health needs was 53.4% (Table 16).

Perceived providers of health assistance for total health needs. In Table 15, the number and percentage of adult children who mentioned each category of provider of health assistance for their parents' physical, psychological, and socioeconomic health needs are depicted. In Table 16 the proportion of each category of provider mentioned by adult children for each health need are summarized.

For all health needs, physical, psychological, and socioeconomic, the proportion of primary providers, excluding the category "myself", was 16.3%. The proportion for the category "myself" was 11.1%. The proportion of

total primary group providers for all health needs was 27.4% (Table 16).

The proportion of secondary group providers, excluding the category "professional nurse", was 23.6%. For the category "professional nurse", the proportion was 1.0%. The proportion of total secondary group providers for all health needs was 24.6% (Table 16).

In the category "no one/no helper needed", the proportion of health needs was 41.3%.

Additional findings: written comments from adult child participants.

Ten adult child participants (4.7%) wrote comments on the questionnaire to the investigator. Seven females and three males corresponded. The following are summary statements.

One participant stated that the "family" should help when they can and that when they are unable to help, professional persons should be sought. For any physical problem, a doctor should be consulted. Two participants identified themselves or a sibling who was geographically closer to their parents would be the person most likely to help their parents.

Four participants expressed difficulty answering the questionnaire since their parents were active, independent, self-reliant, and in good health. Two participants

mentioned that for divorced parents there was difficulty answering the questionnaire, although each stated their answers referred to one parent.

Two participants were concerned about "timing" of their parents' needs. One suggested that instead of the question "as my parents grow older" the question could read "in the next ten years" or "during the ages 60 to 70 years". One participant expressed difficulty knowing when to help parent(s) and when not to since they felt that "doing things" would encourage dependent behaviors that would eventually affect the parent(s)' self esteem.

Major research question

How do adult children perceive health issues of aged parents as their parents grow older?

Data pertaining to the major research question of the present study has been reported in the two previous sections: descriptive findings of the study sample and sections following each research sub-question. In this section, data will be highlighted and presented in a general manner.

The sample utilized in the present study consisted of white middle-aged adults whose age averaged 43 years. Males and females were represented on a near equal basis. The majority of adult children were married with at least two offspring who were under eighteen years of age. The

majority of adult children had post-high school education, had achieved a higher occupational level and had an annual family income of greater than \$35,000. Three-quarters of the adult children reported little or no difficulty living on their present income. Categories of sibling rank in their family of origin were represented. The majority of the adult children considered their own health and the health of household members to be excellent or good.

More than half of the adult children sampled ($n=27$) had two living parents. Approximately two-thirds ($n=28$) of the married adult children had three or four living parents per couple. The average age of both the mothers and the fathers of the adult children was 73 years. Approximately sixty percent ($n=29$) of the adult children lived less than 500 miles from their parents. The majority of adult children reported their parents to have little or no difficulty living on their present income. All of the adult children maintained contact with their parents by telephone usually one time a month; the majority visited their parents about 3-4 times per year and corresponded by letter or mail one time a month.

The majority of adult children described their mothers' health and their fathers' health as excellent or good. Approximately 70% ($n=29$) of the adult children reported their mothers to have chronic health problems, 56% ($n=17$) reported their fathers to have chronic health problems. The most frequently reported health problems of their

parents were: bones and joints, cardiovascular, and respiratory problems.

There were some additional descriptive findings concerning the study sample of adult children. Selected sociodemographic variables concerning the adult child participant (age, sex, education, income, and geographic distance from parents) were correlated with each scale. "Age" was significantly correlated with socioeconomic health needs sub-scale, health assistance for socioeconomic health needs sub-scale, and total health assistance scale. "Sex" was significantly correlated with physical health needs sub-scale, socioeconomic health needs sub-scale, total health needs scale, health assistance for physical health needs sub-scale, health assistance for socioeconomic health needs sub-scale, and with total health assistance scale. "Education" was significantly correlated with health assistance for socioeconomic health needs sub-scale and with total health assistance scale.

The majority of adult children expected their parents to experience physical and psychological health needs while less than half expected their parents to experience socioeconomic health needs as their parents grow older. The majority of adult children expected health assistance for physical health needs of their parents. Approximately three-fifths expected health assistance for psychological health needs, less than half of adult children expected health assistance for their parents socioeconomic health

needs.

Adult children reported persons most likely to help their parents with physical and socioeconomic health needs were providers of health assistance within the secondary group. Less than 2% reported the professional nurse as the person most likely to help their parents with health needs. Help with psychological health needs was reported to be providers of health assistance within the primary group. Adult children perceived themselves to be providers of health assistance primarily for psychological health needs of their parents and least of all for their parents' physical health needs.

Reliability of the Questionnaire

The procedure utilized for determining reliability of the scales used to summarize perceived health needs and perceived health assistance was the coefficient alpha. Coefficient alpha was computed for each of the major scales: perceived health needs (total) and perceived health assistance (total). Coefficient alpha was also computed for each of the sub-scales: physical, psychological, and socioeconomic health needs and health assistance. No items were deleted from the scales. Table 17 summarizes the reliabilities of each scale utilized in the present study.

Table 17. Summary of Reliabilities of Each Scale Using Coefficient Alpha.

Scale	Number of items	Reliability Coefficient
Health Needs (total	51	.93
Physical Health Needs	27	.86
Psychological Health Needs	13	.83
Socioeconomic Health Needs	11	.91
Health Assistance (total)	51	.91
Health Assistance for Physical Health Needs	27	.84
Health Assistance for Psychological Health Needs	13	.80
Health Assistance for Socio-economic Health Needs	11	.87

The reliability coefficient for perceived health needs (total) was .93. Reliability coefficients for the three sub-scales are: perceived physical health needs sub-scale .86, perceived psychological health needs sub-scale .83, and perceived socioeconomic health needs sub-scale .91.

The reliability coefficient for perceived health assistance (total) was .91. Reliability coefficients for the three sub-scales of perceived health assistance are: perceived assistance for physical health needs sub-scale .84, perceived health assistance for psychological health

needs sub-scale .80, and perceived health assistance for socioeconomic health needs sub-scale .87.

Intercorrelations of the scales utilized in the present study were obtained and are depicted in Table 18. Results of factor analysis on physical, psychological and socioeconomic health need items are presented in Table 19. These findings are summarized and interpreted in Chapter VI.

Summary

In Chapter V data were presented that described the study sample. Additional descriptive data were presented which correlated selected sociodemographic variables with each scale. Data pertaining to perceived health needs of aged parents, perceived health assistance for aged parents, and persons most likely to help aged parents were organized according to each research sub-question. Data pertaining to the major research question was summarized in a general manner. Reliabilities of each scale used to measure perceived health needs and perceived health assistance were reported.

In Chapter VI, the study findings will be interpreted and summarized. Implications will be discussed in relation to the conceptual framework utilized as the theoretical basis for the study and in relation to nursing practice, nursing education, and the need for further research.

Table 18. Correlation Matrix: Intercorrelations of Scales Utilized in the Present Study.

	Psychological Health Needs Scale	Physical Health Needs Scale	Socioeconomic Health Needs Scale	Health Health Assist. For Psychological Health Needs Scale	Health Assist. For Physical Health Needs Scale	Health Assist. For Socioeconomic Health Needs Scale
Psychological Health Needs Scale	1.0000					
Physical Health Needs Scale	.6734	1.0000				
Socioeconomic Health Needs Scale	.5293	.5017	1.0000			
Health Assist- ance for Psycholo- gical Health Needs Scale	.7656	.3779	.4037	1.0000		
Health Assist- ance for Physical Health Needs Scale	.5863	.4261	.5097	.6985	1.0000	
Health Assist- ance for Socio- economic Health Needs Scale	.1665	.0375	.6598	.2715	.3417	1.0000

Table 19. Factor Matrix of Health Need Items Within Each Scale.

Physical Health Need	Factor Loading					
	1	2	3	4	5	6
Daytime tiredness	64*	12	10	16	1	24
Swelling of hands or feet	62*	17	13	-2	-17	-9
More days when they don't do their usual activities	58*	14	18	20	26	24
Changes in their daily routines	56*	-15	-4	0	45	9
Increased difficulty adapting to extreme changes in weather	55*	-4	11	19	40	6
Increased difficulty doing household tasks	55*	-7	20	28	20	-21
Shortness of breath	53*	39	-9	-17	7	6
Constipation	11	50*	-16	28	-4	-9
A need to urinate more often	-3	47*	13	9	-4	6
Loss of balance	35	44*	2	-12	36	-39
Cold hands and feet	12	42*	3	-12	39	12
A change in their ability to smell odors	1	40	64*	6	6	10
Increasing deafness	2	-9	57*	4	2	11
Numbness of hands and/or feet	19	47	53*	11	15	-23
Difficulty chewing	41	13	52*	-16	15	24
Problems with denture fit	43	-5	52*	1	14	10
Visual changes	11	3	-13	66*	14	-3
Brief awakenings during the night	25	19	18	52*	-3	50
Longer time to recover from illness	0	1	-22	49*	32	-10
Pain and stiffness in joints	2	9	9	43*	0	14

Table 19. Continued.

Physical Health Need	Factor Loading					
	1	2	3	4	5	6
Need to reduce their calorie intake	8	0	28	39*	-6	23
Safety problems at home	6	-2	18	11	74*	16
Inability to hold their urine	16	44	26	13	52*	-4
Chronic health problems	44	37	-16	13	45*	12
Sleep loss	48	18	14	14	13	58*
Symptoms of disease differently from a younger person	0	-10	12	12	13	56*
More side effects from common medications	27	37	8	-12	21	38*
<u>Proportion of Variance</u>	.13	.08	.08	.06	.08	.06

Psychological Health Needs	1	2
Decreased ability to cope with situations	76*	12
Difficulty thinking through problems	78*	31
Difficulty making up their minds	67*	42
A decrease in their ability to learn new things	65*	26
More times when they will act like children	61*	5
A need for parent-like guidance	60*	34
Feelings of uselessness	50*	7

Table 19. Continued.

Psychological Health Needs	Factor Loading	
	1	2
Taking more time to perform routine activities	27*	-7
Increased need for family closeness	-10	67*
Desire to reminisce	18	62*
Changes in sexual and marital relations	19	52*
Some degree of forgetfulness	8	47*
Difficulty in following any prescribed medication schedule	36	37*
<u>Proportion of Variance</u>	.25	.15
<u>Socioeconomic Health Needs</u>		
Possible difficulty paying for housing	92*	26
Possible difficulty paying utility bills	92*	20
Possible difficulty paying for food	91*	26
Possible difficulty paying for health care services	90*	13
Possible difficulty paying for social activities	85*	7
Possible difficulty in ability to purchase desired clothing	64*	52
Possible difficulty arranging for health care services	45*	43
Difficulty planning a balanced diet	12	72*

Table 19. Continued.

Socioeconomic Health Needs	Factor Loading	
	1	2
Possible difficulty managing personal finances	28	68*
Decreased interest in current events	9	67*
Decreased number of social contacts	10	67*
<u>Proportion of Variance</u>	.43	.23

CHAPTER VI

SUMMARY AND IMPLICATIONS

Overview

In Chapter VI a summary and interpretation of the study findings are presented for the study sample and for each research question. The implications of the findings for nursing practice and nursing education are discussed and recommendations for further research are presented.

Descriptors of the Study Sample

Age. Sex of the participant. Marital status. Number of offspring. The mean age of the adult child participant in this study was 43 years. The majority was between the ages 30-50 years, an age span described by Stevenson (1977) as the core of the middle years. Within the context of the extended family system, the typical participant in this study can be considered as the middle generation. Recent studies of the "middle generation" in extended family systems report ages of subjects over 30 years. Brody (1979), for example, studied attitudes and

preferences for service providers in a sample of 80 family triads where the middle generation ranged in age from 34-62 years with a mean age of 47.9. A few studies do report using respondents younger than 30 years of age (Johnson, 1977) but in general the delineation of middle generation as over 30 years of age used in this study is consistent with past work.

Four-fifths (81.1%) of the study participants were married. Of those with offspring, the mean number of children was 2.68, approximately three-quarters (71.0%) were under eighteen years of age. Compared with national data based on the 1980 census (Current Population Reports, 1981), about sixty percent of all American households were maintained by persons who were married. Thus, the sample contained a larger number of married persons than in the typical American household.

Although the number of male and female study participants were approximately equal, no attempt was made to determine the householder (a term used by the Bureau of Census to designate the head of the household). In contrast, most empirical studies of adult children report samples that are either all female (Brody, 1981) or predominately female (Johnson, 1977). Since women have traditionally assumed parent-care roles, it is not surprising that available literature focuses on female samples. No studies were found concerning males and their relationship with

their elderly parents. Findings from this study regarding sex of the participant are therefore, less subject to sampling bias.

In summary, respondents constituted the middle generation within their extended family. The majority were middle-aged persons with an average of three offspring of their own under eighteen years of age. In contrast to other studies that focused on female participants, the adult children in this study included equally represented male respondents.

Race or ethnic background. All participants were Caucasian. One person stated she was Jewish. No other specific racial or ethnic background was identified by any of the participants. National data based on 1980 census (Current Population Reports, 1981) show that ninety-one percent of married-couple families are maintained by white persons. Sampling bias may have occurred because most of the peers of the investigator who provided names and addresses of potential participants were highly educated and white.

Education. Occupation. Income level. Nearly three-quarters of the adult child participants were executives, business managers or proprietors, administrative personnel, or professionals. Over half (60%) reported incomes of

\$35,000 or above. These two findings are consistent with the respondent's level of education. The majority (70%) of adult children and one-fifth of their spouses (20%) had some college education or had completed post-college education.

It was anticipated that perceptions of financial adequacy could affect answers, therefore respondents were asked as to how difficult it was for their family to live on their combined family income. One-quarter expressed some difficulty living on their present income, while three-quarters expressed little or no difficulty. This finding is consistent with their relatively high reported income level and with the fact that three-quarters were employed full-time. In addition, many spouses were employed (64.4%) as well. These findings may account for why they did not perceive difficulty living on their family income. The study sample, if compared to the population of adult children, was biased with respect to the variables of education, occupation, and income level.

Sibling rank in family of origin. There was no clustering within categories of sibling rank. The proportion of subjects within each category were: forty percent were youngest children, twenty-five percent were oldest children, ten percent were only children, and twenty-percent were middle children. Although sibling rank has been used as

a descriptor of adult children samples (e.g., Robinson, 1979), this variable has not been associated with major study findings. Based on national data, there are more aging parents and fewer adult children to share the care of the parent as the parent grows older (Treas, 1979). It is, therefore, difficult to make inferences about study findings. Regardless of sibling rank, with fewer adult children available, the amount of parent-care involvement may increase; particularly those adult children who live geographically closer to their parents (Bengston, 1976). In addition, if one of the siblings is unable to provide parent-care (e.g., unwilling, or unable due to geographic distance), remaining siblings may experience more involvement.

Health of adult child participant and their household members. Almost all (91.1%) of the adult child participants described their health as good or excellent. Nevertheless, approximately one-third experienced chronic health problems such as respiratory problems, cardiovascular, and problems with bones and joints and one-quarter reported that members of their household had chronic diseases. These findings are not unusual when compared to literature on the general health of middle-aged adults. Middle-aged adults have a higher incidence of disease, especially chronic problems, than do young adults under age 40 (Diekelmann, 1977).

Since the mean age of study participants was 42.6 years, it was expected, although not measured, that their own experience with the aging process might alter their perceptions of their parents' future health needs. The relationship between the adult child's experience with his/her own aging and related health needs and the perception of his/her parents' future health needs is not specifically addressed in the literature and findings from this study would suggest a need to explore this area. This subject is addressed in the discussion on reliability and validity of the scales later in the chapter.

The finding that one-quarter of the participants reported chronic disease among household members may have influenced their perceptions of health care needs in general. Other study findings may have altered the responses of the study sample. An observation was made by the investigator while reviewing answers to the question if chronic health problems were experienced. Most of the respondents identified disease problems, e.g., asthma, and mentioned few personal risk factors such as obesity, stress, alcohol intake. Perhaps the sample of adult children interpreted the question about chronic health problems to mean chronic disease. The study sample may not be aware that personal risks or those risks determined by family history, post-medical problems, occupational habits, and personality (Hake, 1978) are chronic health

problems. There may exist a need for increased public awareness of personal risks associated with health of middle-aged adults and a need for greater public visibility of services that can be provided to middle-aged adults by professional nurses.

Number of living parents. Age of parents. Approximately one-half the study sample had one living parent and the other half had two living parents. Of the married adult child participants, the number of living parents including their spouse's parents was 3 or 4 living parents for two-thirds of the couples and 1 or 2 for the remaining one-third couples. Although the total number of living parents per adult child are generally reported in empirical studies (Robinson, 1979; Simos, 1973), no studies are reported that identify the total number of living parents among married adult children.

It would appear that the adult child who has lost one of his/her own parent(s), or a spouse's parent, has a greater awareness of the health needs of the remaining parent(s). Experience with health problems of aged parents may influence their perceptions of future health needs of their parents. In addition, the adult child may perceive increased involvement (e.g., health assistance) with the remaining parent(s). Although these factors are not measured in the present study, study findings would support the need to assess their influence on the

perceptions of adult children on a practical level.

For both the mothers and fathers of the participants in this study, the mean age was nearly 73 years. Other studies report the age of the elderly parent to be over 70 years (Brody, 1979; Robinson, 1979). Using national data, Brody (1979) notes that there is a rapid and persistent increase in the size of the oldest segment of the elderly population. By the year 2000 the number of those elderly persons 85 years and over is expected to double, while those persons 75-84 years will increase by 57%, and the 65-74 year old group will increase by 23%. Since the parents are living longer and there are fewer adult children to help, each child might expect to be involved with parent-care for longer time and to a greater extent.

There is no consensus in the literature regarding the onset of "old age". Stevenson (1977) considers age 70 as the beginning of late adulthood. Neugarten (1979) distinguishes between the young-old and old-old. The Bureau of Census considers age 65 and over as the older population. Age 65 was chosen as the minimum age for an aged parent because of its general acceptance in our society as the "onset" of old age. Recent literature suggests that this cultural norm may be changing. The adult children in this sample perceived their parents to be in relatively good health and of the aged parents lived outside of an institution. These factors, although not directly measured, may have

influenced their responses since the parents may not yet have experienced health needs requiring health assistance.

In summary, the number of living parents per adult child participant and per married couple in the present study are consistent with reports available. The mean age of the parents of adult children in this study can be interpreted as an "old" or an "elderly parent" and therefore would be likely to experience future health needs.

Geographic distance from parents. Three-fifths of the adult children reported living less than 500 miles from their parents or less than a day's drive from them. Nearly one-fifth reported living ten miles or less from their parents.

Findings in the present study would support observations about national trends. Most of the literature on geographic distance from parents is based on national surveys. For example, Olsen (1980) notes that most older parents have adult children within easy visiting distance. Although research studies often use geographic distance as a descriptor (e.g., Robinson, 1979), it is not reported with major findings. Shanas (1979) notes that the proportion of elderly parents and adult children living in the same household has declined in the last twenty years, from 36% in 1957 to 18% in 1975. At the same time there has

been a consistent proportion of older persons living within ten minutes of an adult child: 56% in 1957, 61% in 1962, 52% in 1975. Geographic distance will be discussed in more detail in the section, additional findings regarding the study sample.

Usual type and frequency of contact. Nearly all of the adult children in the study sample usually contacted their parents by telephone or visited them; three-quarters usually corresponded by letter/mail. There was no clustering in categories of frequency of contact; most reported a frequency of contact ranging from about every week to three or four times a year.

In general findings in the present study would tend to support national surveys and empirical studies. Using national data, Shanas (1979) reports no decrease in visiting between older parents and at least one of their adult children in a twenty year period (1957 to 1975); daily, weekly, and monthly visiting patterns have remained stable. Robinson's study (1979) of adult children caring for their parents lends support to findings in the present study; in her study, 47% of adult children reported visiting their parents weekly or daily, 13% saw them at least one time a month, 40% saw them less than one time a month. In the present study fewer adult children reported visiting their parents weekly or daily (29.8%), more reported seeing their

parents at least one time a month (21.3%) and approximately the same number saw their parents less than one time a month (44.7%).

Difficulty of parents living on their present income.

Three-quarters of adult child participants perceived their parents to have little or no difficulty living on their present income. This finding is unusual when considered with the fact that one of the criteria to be a participant in this study was that one or both parents were 65 years or older and retired. It was expected that more adult children would perceive that their aged parents would experience difficulty since the present cohort of older persons often-times live on fixed incomes and the economy is relatively inflationary. Caution must be used when interpreting this finding since actual socioeconomic status of the parents is not known.

Garlinghouse (1982) notes that the present cohort of older adults have lived through two World Wars and a major economic depression and that perhaps the older person of today has learned to adapt to unstable economies. Perhaps their adult children were able to perceive their parents' efforts to maintain financial stability and independence despite economic hardships. In general, older persons do not wish to be financial burdens to their families (Silverstone, 1981). Perhaps the adult children

in this sample perceived their parents' desire for financial independence. On the other hand, the sample of adult children were of relatively high socioeconomic status and may be projecting their own socioeconomic security onto their parents' situation (the sample were of higher socioeconomic status).

In summary, the fact that three-quarters of the sample of adult children perceived their parents to experience little or no difficulty living on their present income, regardless of why, is an important finding in relation to the research questions. It can be concluded, within the scope of this study, that the adult children may not perceive financial difficulty of their parents should their parents actually experience socioeconomic health needs in the future.

Parents' health. More adult children reported their fathers than their mothers to be in good or excellent health. More mothers than fathers were reported to be in fair or poor health with a higher incidence of chronic health problems, 69.0% and 56.7% respectively. The two most frequently reported chronic health problems for both parents were cardiovascular problems and problems with bones and joints. Parents' health is discussed further in the section following Research Sub-question 1.

The incidence of chronic disease increases with age; after 75, more limitations resulting disabilities have

been reported (Kovar, 1977). Brody (1981) notes that approximately only 7.1% of older persons between the ages of 65 to 74 are in institutions, however, one-third of non-institutionalized older persons need supportive services for functional impairments. The incidence of cardiovascular problems and problems of bones and joints of older parents have been reported in studies of other adult children samples (Robinson, 1979; Simos, 1973). In general, study findings about parents' health are consistent with other reports on the health problems of older persons who are also elderly parents.

In summary, a small sample of forty-seven adult children with aged parents has been described using demographic and other descriptors. Descriptive findings are similar to other samples of adult children. Compared to the population of adult children, the study sample consisted of all whites, highly educated, and were of a relatively higher socioeconomic status. In the next section, additional findings relevant to the study sample will be presented.

Additional Findings Regarding the Study Sample

Selected sociodemographic variables concerning the adult child participant (age, sex, education, income, and geographic distance) were correlated with each scale utilized in the present study. In Chapter V, results of Pearson

Product Moment Correlations were reported for statistically significant relationships (Table 9). In this section, data are summarized and interpreted for statistically significant relationships.

Age. There was a negative relationship between age of the adult child participant and three scales utilized in the present study: socioeconomic health needs, health assistance for socioeconomic health needs, and the total health assistance scale. As the age of adult children increased, they perceived fewer socioeconomic health needs for their parents and less need for someone to provide assistance for their socioeconomic needs. As age increased, they perceived less health assistance for their parents' total health needs. Younger adult children perceived more socioeconomic health needs, more health assistance for socioeconomic health needs, more health assistance for their parents' total health needs in general.

Although these relationships are statistically significant, their practical significance must be considered along with other descriptive findings of the present study. For example, sample means and standard deviations for each scale (Table 12 and Table 14, Chapter V), would suggest that the average score for these scales was neutral or near neutral. Three-quarters (72.4%) of the adult children reported their parents to have little or

no difficulty living on their present income and, therefore, a significant correlation might be expected for this sample of adult children. Perceptions of their parents' health needs may have been influenced by their own sense of economic security and ability to meet their own socioeconomic needs.

As previously noted, the study sample consisted of a large number of highly educated persons with relatively high income levels. No studies were located in the literature that established a relationship between age or education level of adult children and their perceptions of specific health needs or health assistance concerning their parents. The findings from this study vary from the Simos' study (1973) which suggested that adult children (ages 30-68 years) were able to identify socioeconomic problems of their parents (for example, financial problems, paying for health care) not only in the context of current realities but also in terms of future expectations of need. The fact that older participants tended to have lower scores on these scales could be due to their sense of financial security. Perhaps older participants do not consider socioeconomic health needs as part of the health care of their parents. Younger participants, however, may be projecting their own sense of financial insecurity on to their parents' future socioeconomic health needs.

The reliabilities for the three scales were high, as was the level of significance of the correlations, resulting

in confidence that the correlations were unlikely to have been the result of chance. In similar samples of adult children (who are highly educated and of higher socioeconomic status), it is likely that a negative relationship exists between age of the adult child and the three scales.

Sex. There was a negative relationship between sex of the adult child participant and six out of eight scales utilized in the present study: physical health needs, socioeconomic health needs, total health needs scale, health assistance for physical health needs, health assistance for socioeconomic health needs, and total health assistance scale. Males tended to have higher scores than females in this sample of adult children.

Studies of other adult children samples report sex as a descriptor but not as a variable related to major findings. Johnson (1978) studied the affective quality of the relationship between elderly mothers and their daughters. Simos (1973) and Robinson (1979) each studied male and female adult children but did not report differences in parent care based on sex of the subject. Brody (1981) observes that although empirical studies on older persons in need of help look to their daughters rather than sons for assistance and daughters respond, such data do not imply lack of responsibility or family feeling on the part of sons. Rather, data reflect the cultural assignment of gender-appropriate roles. Sons are more likely to experience

the repercussions of parent-care through the effects on their wives. Lopata (1973) found that sons of widows help with financial management and with funeral arrangements.

Findings from this study would suggest that sons do perceive health needs of their parents, particularly their physical and socioeconomic health needs. Sons also expect to provide health assistance for their parents' health needs in general and particularly, health assistance for their physical and socioeconomic health needs. The relationship between sons and their elderly parents and the role of sons in parent care are topics not specifically addressed in the literature and findings from this study would suggest a need to explore this area. Findings from this study suggest a need to involve sons more in the general health care of their parents.

Each of the six scales that correlated with sex of the participant had a high reliability. In addition, the level of significance of the correlations resulted in confidence that they were unlikely to have been the result of chance. These findings have some practical value. In similar samples of adult children, the investigator can be reasonably confident that negative relationships exist between sex of the participant and each of the six scales.

Education. There was a positive relationship between education of the adult child participant and two scales

utilized in the present study: health assistance for socioeconomic health needs and total health assistance scales. As the level of education increased, adult children perceived more of their parents' socioeconomic health needs and a greater need to provide health assistance for their parents' health needs in general.

Program evaluation studies reported by Johnson and Spence (1982) and Silverman (1977) suggest that education of adult children regarding expected changes that occur as their parents grow older is an effective intervention for adult children. Over 87% of the sample had post-high school education and it would seem likely that more scales should have positively and significantly correlated with education. Based on study findings, education of adult children about future health needs of their parents would be necessary in such programs regardless of the educational background of the adult child.

Income level. None of the scales utilized in the present study correlated significantly with the variable income level. In contrast to study findings, literature suggests that filial responsibilities may be related to socioeconomic status (Seelbach, 1978; 1980). Confounding variables such as size and characteristics of the sample may have influenced the relationship between income and scales utilized in the present study. Repeated use of the scales

in other samples of adult children whose income level is widely varied may yield different relationships.

Perception of health needs and health assistance may be one aspect of the general term "filial responsibilities." The term is used in literature in a broad, somewhat vague manner. For future research, findings from this study would suggest a need to operationalize the term as it relates to the relationship between perception and actual care of parents. For example, income level of adult children may be positively related to ability to purchase services for their parents rather than their perception of the need for the services.

Geographic distance from parents. None of the scales utilized in the present study correlated significantly with the variable geographic distance. Recent empirical studies (Egerman, 1966; Jonas, 1980; Shanas, 1979; Sussman, 1974) have demonstrated that aging parents do turn to and depend upon their adult children to help in meeting daily requirements of living and in times of illness. Since most of the adult children relatively close to their parents, the lack of significant correlations is considered unexpected. Confounding variables such as size and characteristics of the study sample may have influenced the relationship between geographic distance and perceived health needs and perceived health assistance scales.

Bengston et al. (1976) postulates that the variable geographic distance is positively related to the amount of contact possible, or association, between family members and the helping behaviors among the older and middle generations. The adult children in this study were highly educated and of higher socioeconomic status which could be confounding variables. For example, an adult child may perceive a health need of his/her parent and may perceive health assistance. The adult child in this sample could possibly afford to go to the parent or bring the parent closer to the adult child for help.

Hess and Waring (1978) conclude, after an extensive review of literature on intergenerational relations, that maintenance and sustenance of the adult child/aged parent bond will be increasingly based on the willingness of both family members to engage in supportive behavior. Willingness of the adult child to provide parent care may be a confounding variable affecting the relationship between geographic distance and perception of health need and health assistance. This willingness often hinges on the quality of the relationship over many preceding decades (Troll, 1980). Study findings suggest the need to explore the relationship between "willingness" of the adult child to provide care and their perception of the care needed by their parent(s).

Archbold's qualitative analysis (1982) of parent care,

as cited earlier, suggests the existence of three parent-care roles: care provision, care management, and care transfer. Four factors influenced whether or not the adult child assumed a parent-care role: socioeconomic status, housing arrangements, illness onset of the parent, and past experience with caregiving. Socioeconomic status was the primary determinant of whether or not services could be purchased.

Based on findings from this study, it is possible that adult children perceived their parents' health needs and health assistance regardless of geographic distance from their parents. Perhaps their "perceived role" in parent-care may be related more to the variable geographic distance. Findings from this study would suggest a need to explore the manner in which perceptions, behavior, and selected sociodemographic variables of adult children are related to their parents' health needs and health assistance.

Summary of additional findings regarding the study sample. Statistically significant relationships between selected sociodemographic variables concerning the adult child participant and each scale utilized in the study were summarized. Data were interpreted in relation to other findings in the present study and in relation to other studies reported in the literature. Age and sex of the adult child participant significantly correlated

with the socioeconomic health needs scale; age, sex, and education significantly correlated with health assistance for socioeconomic health needs scale; age, sex, and education significantly correlated with total health assistance; and sex of the participant significantly correlated with total health needs, physical health needs, and health assistance for physical health needs. No significant relationships were found for income level and geographic distance.

Research Questions

Research Sub-question 1

What are the physical, psychological, and socioeconomic health needs of aged parents as perceived by their adult children as their parents grow older?

Perceived physical health needs. The rank order of perceived physical health needs was presented in Table 11 (Chapter V). More than half the adult children expected their parents to experience twenty out of a possible twenty-seven physical health needs. Nearly all of the adult child participants expected their parents to experience three physical health needs: pain and stiffness in joints, visual changes, and longer time to recover from illness.

In relation to other descriptive findings, these findings are not unusual. The most frequently reported chronic health problems experienced by their parents were problems with bones and joints and cardiovascular problems. Since visual changes tend to occur after age 40 (Barrowchough and Pinel, 1981; Dickelmann, 1977) and the average of the adult child participant was 43 years, it is likely that the adult child had already experienced visual changes and/or their parents had already experienced visual changes which may have influenced their response to this item. The average age of their parents was 73 years and since morbidity rates increase with age, the adult child may have had experience with their parents' need for a longer time to recover from illness, particularly chronic illness.

"Difficulty chewing" was the least reported (26.1%) physical health need adult children expected their parents to experience as they grew older. Gift (1979) cited studies conducted in 1975 for the American Dental Association in which researchers found that 44% of persons over 60 years old had full dentures, 16% had all their natural teeth, and 38% had partial dentures or some missing teeth. In addition, Gift noted that because, in part, of the atrophy of alveolar bone, excellent dentures properly fitted may become loose and inefficient over time. Findings from this study suggest that should elderly persons

experience difficulty chewing, their children may not perceive this problem as a health problem which could possibly result in nutritional problems.

As in the Simos study (1973) the majority of adult children participating in the present study expected their parents to experience physical health needs as they grow older. Since perceptions are influenced by a multiplicity of factors (as discussed in Chapter II), caution must be exercised when interpreting descriptive findings for single items within a scale.

Statistically, the sample mean for perceived physical health needs scale was 2.487 with a standard deviation of .374 (Table 12, Chapter V). Assuming that scores are normally distributed in the study population, the standard deviation, like the mean, is an important statistic when interpreting variability. One of the limitations of the Likert scale is that it forces the respondent to make a choice, which affects variability (Crano and Brewer, 1972).

When the sample mean and standard deviation for the physical health needs scale are considered together, several statements can be made. When one standard deviation is added to the sample mean, the result is 3.227 or a slightly neutral response on the Likert scale. In other words, assuming scores are normally distributed in populations of adult children, slightly less than 85% of the study sample thought their parents would experience

physical health needs as they grow older. When the high reliability coefficient (.86) is considered with the sample mean and standard deviation of the sample, it can be concluded that approximately 85% of the adult children in the study agreed their parents would experience physical health needs as they grow older. From a practical standpoint, since most of the parents of the study sample experienced chronic health problems, it is likely their children had perceived some of their physical needs.

Perceived psychological health needs. The rank order of perceived psychological health needs was presented in Table 11 (Chapter V). More than half of the adult child participants expected their parents to experience seven out of a possible 13 psychological health needs. Nearly all of the participants expected their parents to experience four psychological health needs: taking more time to perform routine activities, some degree of forgetfulness, increased need for family closeness, and desire to reminisce. These changes can be expected to occur with "normal aging" (Barrowclough and Pinel, 1981, Garlinghouse, 1982). Literature on elderly parents and their adult children (e.g., Shanas, 1979) suggests that the older parent perceives a greater need for family closeness than their adult children. Findings from this study would tend to support the premise that adult children do perceive

their parents' need for increased family closeness. Nearly one-third of the participants agreed that their parents would experience: a need for parent-like guidance and more times when they will act like children. It is beyond the scope of this study to interpret this finding as support for Rautman's (1962) concept of role reversal. Nevertheless, the practitioner would be wise to assume that some adult children perceive the psychological health needs of their parents to include a need for parent-like guidance and an increased number of times when their parents will act like children. Simos' (1973) sample of adult children reported more negative and/or pathological problems associated with their parents' psychological needs such as depression or generalized unhappiness. Again, caution must be used when interpreting descriptive findings for single items within the scale.

The sample mean for psychological health needs scale was 2.578 with a standard deviation of .554. When one standard deviation is added to the sample mean, the result is 3.132 or a slightly neutral response on the Likert scale. In other words, assuming scores are normally distributed in populations of adult children slightly less than 85% of the sample agreed their parents would experience psychological health needs as they grow older. When the high reliability coefficient (.83) is considered with the sample mean and standard deviation, it can be concluded

that approximately 85% of the adult children utilized in the present study agreed their parents would experience psychological health needs as they grow older.

Perceived socioeconomic health needs. The rank order of perceived socioeconomic health needs was presented in Table 11 (Chapter V). Of the eleven socioeconomic health needs, half of the adult children did not expect their parents to experience socioeconomic health needs as they grow older. This is not an unusual finding since three-quarters of the adult children perceived their parents to have little or no difficulty living on their present income.

For less than half of the participants the most frequently reported socioeconomic health needs were: possible difficulty arranging for health care services, decreased number of social contacts, and possible difficulty managing personal finances. Simos' (1973) sample of adult children reported many socioeconomic problems of their elderly parents and noted that these problems were difficult for the adult child to anticipate. Again, caution must be exercised when interpreting descriptive findings for single items within a scale since perceptions are influenced by a multiplicity of factors.

The sample mean for socioeconomic health needs scale was 3.375 with a standard deviation of .797. When one standard deviation is added to the sample mean, the result

is 4.172 or a slight disagree response on the Likert scale. In other words, assuming scores are normally distributed in populations of adult children, slightly less than 50% of the sample were neutral about whether or not their parents would experience socioeconomic health needs as they grow older and 30% probably disagreed. From a practical standpoint, the practitioner must be aware that should socioeconomic problems occur with elderly persons, findings from this study would suggest that their children may not perceive them as health needs. When the high reliability coefficient (.91) is considered with the sample mean and standard deviation, it can be concluded that probably 50% of the adult children in the present study were neutral as to whether or not their parents would experience socioeconomic health needs as they grow older and probably 30% disagreed.

Because of rapidly fluctuating economic conditions, comparisons of income levels between study populations in different years is difficult to interpret. Nevertheless, it would seem likely that future financial constraints might exist for this sample of adult children since many of them have young children whose financial needs will become greater as they approach college age and/or should the spouse become unemployed. Projecting beyond the scope of this study, dependency needs of their elderly parents, whose present age averages 73 years, may trigger additional financial problems particularly if parents live on a fixed

income. From a practical standpoint, the practitioner must be aware that should aged parents experience financial needs, findings from this study would suggest that their adult children may experience concurrent financial pressures.

Perceived health needs (total). Adult children in the present study expected their parents to experience more physical and psychological health needs than socioeconomic health needs as they grow older. The five most frequently reported health needs were: pain and stiffness in joints, visual changes, a longer time to recover from illness, taking more time to perform routine activities, and some degree of forgetfulness. These health needs are consistent with literature on expected changes with aging as well as the parents' health status as reported by their children in this study.

The sample mean for total health needs scale was 2.701 with a standard deviation of .438. When one standard deviation is added to the sample mean, the result is 3.139 or a slightly neutral response on the Likert scale. In other words, assuming scores are normally distributed in populations of adult children, slightly less than 85% of the sample agreed their parents would experience physical, psychological, and socioeconomic health needs as they grow older. When the high reliability coefficient (.93) is

considered with the sample mean and standard deviation, it can be concluded that probably 85% of the adult children in the present study expected their parents to experience physical, psychological, and socioeconomic health needs as they grow older. More physical and psychological health needs were expected than socioeconomic health needs. Not all health needs were perceived equally; should their parents experience a particular health need, their adult children may be unaware of the need as it relates to their parents' over-all health.

Research Sub-question 2

What are the expectations of health assistance for aged parents as perceived by their adult children as their parents grow older?

Perceived health assistance for physical health needs.

In Table 13 (Chapter V) the rank order of health assistance for physical health needs as reported by their adult children was listed. All twenty-seven health needs were identified, however, only seven had a response rate of 50% or more. The most frequently reported physical health needs that health assistance was expected include: visual changes, a longer time to recover from illness, increased difficulty doing household tasks, and pain and stiffness in joints. Although parental physical health needs were perceived, it is possible that their adult children may not perceive

health assistance as necessary or available for their parents. They may consider their physical health needs as "something to live with" or "to be concerned with" at the time the parent experiences the need.

The sample mean for perceived health assistance for physical health needs scale was 2.809 with a standard deviation of .367. When one standard deviation is added to the sample mean, the result is 3.176 or a slightly neutral response on the Likert scale. In other words, it is estimated that slightly less than 85% of the sample agreed or were neutral that their parents would need health assistance for physical health needs as they grow older. When the high reliability coefficient (.84) for the scale is considered with the sample mean, standard deviation, and with findings on perceived physical health needs, a conclusion can be made about this sample of adult children. It is estimated that nearly 85% of the sample expected their parents to experience physical health needs as they grow older and they expected their parents would require health assistance for these physical health needs.

Perceived health assistance for psychological health needs. In Table 13 (Chapter V) the rank order of health assistance for psychological health needs was presented. Fifty percent or more of the sample expected their parents to need health assistance for only two out of a possible

13 psychological health needs. Since the adult children were able to perceive most of their parents' psychological health needs, they may not perceive health assistance as required or available for their parents. Like the Simos study (1973), they may perceive psychological needs of their parents based on past/present interactions and therefore are unlikely to expect them to change or require assistance in the future. The three most frequently reported psychological health needs that health assistance was expected were: increased need for family closeness, feelings of uselessness, and some degree of forgetfulness. Since perceptions are influenced by complex factors caution must be used when interpreting descriptive findings for single items in the scale. These three psychological health needs could affect interpersonal relationships.

The sample mean for perceived health assistance for psychological health needs was 2.909 with a standard deviation of .484. When one standard deviation is added to the sample mean, the result is 3.393 or a neutral response on the Likert scale. Although half the sample agreed their parents would need health assistance for psychological health needs, nearly thirty percent were neutral. The high reliability coefficient (.80) of the scale would suggest that the scale measured perceptions fairly well in this particular sample.

While it is estimated that nearly 85% of the adult children expected their parents to experience psychological

health needs as they grow older, only 50% expected their parents to require health assistance for their psychological health needs and nearly 30% were neutral. The sample perceived more health assistance for their parents' physical health needs than for their psychological health needs.

In the Simos' sample (1973) of adult children, all the elderly parents were perceived to have psychological problems; three-quarters reported a variety of family problems due to "parental aging". Similarly, results of Johnson's study (1978) of elderly mothers and their daughters indicate that attitude toward aging was the strongest predictor of the affective quality of the relationship. Perhaps the adult children in this sample felt health assistance was not necessary partly because their parents' future psychological health needs would be more difficult to distinguish than their physical health needs.

Perceived health assistance for socioeconomic health needs. In Table 13 (Chapter V) the rank order of perceived health assistance for socioeconomic health needs was presented. No health assistance was expected for more than half their parents' socioeconomic health needs. The most frequently reported socioeconomic health needs for which health assistance was expected include: possible difficulty arranging for health care services, possible difficulty managing personal finances, and decreased number of social contacts. Caution must be exercised when interpreting

descriptive findings for single items in the scale since perceptions are influenced by many factors. These socioeconomic health needs could possibly involve the use of social skills.

The sample mean for perceived health assistance for socioeconomic health needs was 3.290 with a standard deviation of .842. When one standard deviation is added to the sample mean, the result is 4.132 indicating a disagree response on the Likert scale. Although it is estimated that half the sample were neutral about whether or not health assistance is expected for their parents' socioeconomic health needs, nearly 30% tended to disagree that their parents would need health assistance. The high reliability coefficient (.87) of the scale would suggest that the scale measured perceptions fairly well in this particular sample.

In the Simos study (1973), adult children had difficulty distinguishing between their parents' actual social problems and what they thought should be their parents' social problems. In addition, they tended to "blame the system" for making it financially prohibitive to care for their parents and believed it was society's responsibility to support their parents as payment for past productivity. In contrast, the study sample ranked more socioeconomic health needs involving social skills than financial needs.

In this study, it is estimated that 50% of the sample

were neutral about whether or not their parents would experience socioeconomic health needs as they grow older. In addition, three-quarters reported their parents to have little or no difficulty living on their present income. The fact that they expected less health assistance for their parents' socioeconomic health needs, as compared to physical and psychological health needs, would suggest that they either did not know if health assistance would be available, how to use it; or, they may not perceive health assistance for socioeconomic health needs as contributing to their parents' future health. For example, if their parents were experiencing difficulty paying for food (i.e., due to a fixed income in an inflationary economy), the adult child may not perceive this need as affecting his/her parents' nutritional status. In addition, the adult child may not perceive the need for his/her parents to apply for such government-supported programs as food stamps or attend federally subsidized meal programs.

Perceived health assistance (total). Adult children in the present study sample expected their parents would require more assistance for their physical and psychological health needs than for their socioeconomic health needs. The five most frequently reported health needs for which adult children expected health assistance were: visual changes, a longer time to recover from illness, increased

difficulty doing household tasks, pain and stiffness in joints, and increased need for family closeness. Caution must be exercised when comparing single items from various scales since perceptions are influenced by a multiplicity of factors. Study findings must be interpreted in relation to other descriptive findings, relevant studies reported in the literature and statistical analysis.

The sample mean for total health assistance was 2.956 with a standard deviation of .388. When one standard deviation is added to the sample mean, the result is 3.344 or a neutral response on the Likert scale. Although it is estimated that half the sample agreed their parents would need health assistance for their physical, psychological, and socioeconomic health needs, approximately 30% tended to be neutral about health assistance for their parents' total health needs.

The high reliability coefficient (.91) for the health assistance (total) scale would suggest that the scale measured perceptions consistently as did the scale used to measure perceived health needs (total). In general, it is estimated that nearly 85% of the sample of adult children expected their parents to experience physical, psychological, and socioeconomic health needs but only 50% agreed or were neutral that their parents would need health assistance for them. This finding may suggest difficulty of the adult children to anticipate future

health assistance for their parents. In addition, should future health assistance be needed for elderly parents, their adult children may have difficulty understanding implications of the need for health assistance in relation to their parents' over-all health. From a practical standpoint, the practitioner who is involved with aged parents cannot assume their adult children perceive help is necessary for all their parents health needs, and, although not measured in this study, they may expect their parents to care for themselves (i.e., as they have always done).

Research Sub-question 3

Who is likely to provide health assistance to aged parents as perceived by their adult children as their parents grow older?

Perceived providers of health assistance for physical health needs. Table 15 in Chapter V includes data about physical health needs and the frequency distribution of providers. Table 16 in Chapter V illustrates the proportion of providers for physical health needs. Adult children in the present study perceived themselves to be providers of health assistance for the following physical health needs: safety problems at home, increased difficulty doing household tasks, more days when they don't do their usual activities. Other providers within the

parents were capable of caring for themselves (i.e., as they always have been able to do). From a practitioner's point of view, adult children did not expect professionals to help with all of their parents' physical health needs. The practitioner must be aware of who, if anyone, the adult child perceives as the provider of health assistance which may differ from the practitioner's expectations. This would be of special significance should the adult child be labeled "uncooperative" or "unwilling to assume filial responsibility."

Caution must be used when interpreting who is likely to help parents with a specific health need since data were based on an index in contrast to scales used to measure perceived health needs and health assistance. Comparisons and generalizations are limited to the study sample; scaling permits the use of statistical analysis to make inferences about the study population.

Perceived providers of health assistance for psychological health needs. In Table 15 (Chapter V) psychological health needs and frequency distributions of providers are depicted. Table 16 (Chapter V) includes data about the proportion of providers for psychological health needs.

The adult children utilized in the present study perceived themselves to be providers of health assistance for the following psychological health needs of their

their ability to smell odors, a need to urinate more often, and brief awakenings during the night. These needs may have been perceived as "normal or expected" changes as their parents grow older that require no assistance and, therefore, "something to live with."

Based on frequency distributions and proportions of providers, several statements about the data can be made. For less than half of their parents' physical health needs (41.3%), adult children expected providers of health assistance within the secondary group to help their parents. For over one-third (36.8%) of their parents' physical health needs, no one/no helper was expected. In general, providers of health assistance within the primary group, including the adult child, were expected to help parents with very few physical health needs. They seemed to expect professionals to take a more active part than themselves or other providers within the primary group. Results of Brody's study (1979) of three generations of women would support the preference of providers within the secondary group for "hands on" activities. Archbold (1982) identifies several factors that influence whether or not an adult child will directly provide parent-care.

Although secondary providers of health assistance were preferred, no help was expected for approximately 40% of the physical health needs. The adult children in this sample may have perceived their parents physical health needs as "something to live with" or that their

primary group were expected to help their parents with the same physical health needs.

The proportion of physical health needs that adult children expected providers within the primary group excluding themselves was 11.0%. They perceived themselves to be providers for 5.1% of physical health needs. When these two categories were combined, providers within the primary group were expected to help their parents with 16.1% of the parents' physical health needs.

Within the secondary group of providers (excluding the category "professional nurse"), the sample of adult children expected their parents to be helped with: visual changes, pain and stiffness in joints, swelling of hands and feet. The professional nurse was expected to help with two physical health needs, more side effects from common medications and constipation.

The proportion of physical health needs that the sample of adult children expected providers within the secondary group, excluding professional nurse, was 39.5%. The professional nurse was selected to help with 1.8% of their parents' physical health needs. When these two categories of providers were combined, providers within the secondary group were expected to help their parents with 41.3% of their physical health needs.

No one/no helper was expected for 36.8% of their parents' physical health needs. The physical health needs that minimal help was expected include: a change in

parents: increased need for family closeness, a need for parent-like guidance, decreased ability to cope with situations, difficulty thinking through problems. They expected other providers within the primary group to help with: desire to reminisce, some degree of forgetfulness, increased need for family closeness, decreased ability to cope with situations. These psychological health needs can be considered to be changes in interpersonal relations and problem-solving difficulties. Literature reports (Archbold, 1981; Brody, 1979; Lopata, 1978) findings that middle-aged adult children desire their relationship with their aged parents to include emotional closeness and confidentiality.

The proportion of psychological health needs that adult children expected providers within the primary group excluding themselves to provide health assistance was 27.8%. They perceived themselves to be providers for 18.9% of their parents' psychological health needs. When these two categories are combined, providers within the primary group were expected to help their parents with 46.7% of their psychological health needs.

Within the secondary group of providers (excluding the category professional nurse), the sample of adult children expected their parents to be helped with: changes in sexual and marital relations, feelings of uselessness, and decreased ability to cope with situations. The professional nurse was expected to help with one psychological

health need, difficulty following any prescribed medication schedule. Often providers within the secondary group are educated or trained to assist persons with these psychological health needs; for example, a counselor often helps persons to cope with situations. The adult child in this sample was able to identify health needs and differentiate various services provided by various providers of health assistance and possibly expected their parents to use appropriate providers as necessary.

The proportion of psychological health needs that the sample of adult children expected providers within the secondary group, excluding professional nurse, was 5.5%. They perceived the professional nurse to help with 0.3% psychological health needs. When these two categories of providers were combined, providers within the secondary group were expected to help their parents with 5.8% of their psychological health needs.

No one/no helper was expected for 39.1% of their parents' psychological health needs. The psychological health needs that minimal help was expected include: a decrease in their ability to learn new things, changes in sexual and marital relations, more times when they will act like children, and taking more time to perform routine activities. These types of psychological health needs of elderly persons may be considered to be social myth (Shanas, 1979). Perhaps the adult children perceived no

one to help for that reason. Their higher education level may account for this finding.

Based on frequency distributions and proportions of providers, several statements about the sample can be made in contrast to findings about physical health needs. For less than half of their parents' psychological health needs (46.7%), adult children expected primary providers of health assistance to help their parents. For approximately 49% of their parents' psychological health needs, no one/no helper needed was expected. Providers of health assistance within the secondary group, including the professional nurse, were expected to help parents with very few psychological health needs and more physical health needs. The adult children may have felt that their parents should be able to care for their own future psychological health needs (i.e., because they always have) and if assistance were needed family would help (i.e., to keep problems within the family). Again, caution must be used when generalizing to the study population since data interpretations were based on an index.

Perceived providers for socioeconomic health needs.

In Table 15 (Chapter V) frequency distributions of providers for socioeconomic health needs are presented. Table 16 (Chapter V) includes data about the proportion of providers for socioeconomic health needs.

The adult children in the present study perceived themselves to be providers of health assistance for the following socioeconomic health needs of their parents: possible difficulty managing personal finances, possible difficulty paying for housing, possible difficulty arranging for health care services, possible difficulty paying for social activities. They perceived other providers within the primary group to help with: decreased number of social contacts, possible difficulty arranging for health care services, possible difficulty managing personal finances. Primary providers were expected to help with socioeconomic health needs that included financial problems, housing, health care services, and social problems.

The proportion of socioeconomic health needs that adult children expected providers within the primary group, excluding themselves, to provide health assistance was 15.7%. Adult children in this study perceived themselves to be providers for 16.6% of their parents' socioeconomic health needs. When these two categories were combined, providers within the primary group were expected to help their parents with 32.3% of their socioeconomic health needs.

Within the secondary group of providers, excluding the category professional nurse, the sample of adult children expected their parents to be helped with: possible difficulty arranging for health care services, possible difficulty paying for health care services, possible

difficulty paying for utility bills. In recent years, these socioeconomic needs have been met by various providers within the secondary group (i.e., government workers who refer elderly persons to federal programs to help pay heat bills). The professional nurse was expected to help with one socioeconomic health need, difficulty planning a balanced diet. The professional nurse was perceived in a limited, somewhat "traditional" role as a provider of health assistance.

The proportion of socioeconomic health needs that adult children expected providers within the secondary group, excluding professional nurse, to provide health assistance was 4.8%. They perceived the professional nurse to help with 0.2% of socioeconomic health needs. When these two categories of providers were combined, providers within the secondary group were expected to help parents with 5.0% of their socioeconomic health needs.

No one/no helper was expected for 53.4% of their parents' socioeconomic health needs. The socioeconomic health needs that minimal help was expected include: decreased interest in current events, possible difficulty paying for social activities, possible difficulty in ability to purchase desired clothing. These needs can often be delayed and/or the parents can provide for themselves (i.e., because they always have).

Based on frequency distributions and proportions of

providers, several statements about the data can be made. For slightly more than half (53.4%) of their parents' socioeconomic health needs, no one/no helper needed was expected. For approximately one-third (32.3%) of their parents' socioeconomic health needs, adult children expected primary providers of health assistance to help their parents. In general, providers of health assistance within the secondary group, including the professional nurse, were expected to help parents with very few socioeconomic health needs. This finding is consistent with the finding that they did not expect their parents to experience many socioeconomic health needs in the future.

Perceived providers of health assistance for total health needs. For all health needs in general, physical, psychological, and socioeconomic health needs, the adult children in the present study perceived themselves to be providers of health assistance for 11.1% of their parents' health needs. Adult children expected themselves to be the provider of health assistance for approximately the same proportion of health needs as other providers in the primary group. Providers within the primary group were expected to help their parents with approximately one-quarter (27.4%) of their total health needs. Providers of health assistance within the primary group were expected to help their parents with more psychological health needs.

Within the secondary group of providers, excluding the category professional nurse, the sample of adult children expected their parents to be helped with 23.6% of their health needs. The nurse was expected to help with 1.0% of their parents' health needs. When these two categories were combined, providers within the secondary group were expected to help their parents with approximately one-quarter (24.6%) of their health needs. No help was expected for nearly half (41.3%) of their parents' health needs. Providers of health assistance within the secondary group were expected to help with more of their parents' physical health needs. For most of their parents' socioeconomic health needs, no one/no helper was expected.

Based on the proportion of provider categories mentioned by the sample of adult children for their parents' total health needs, some statements about providers of health assistance can be made. For nearly half of their parents' total health needs, the sample of adult children expected no one/no helper. Possibly they did not perceive help to be available or necessary for all of their parents' health needs. They may have expected their parents to care for themselves or they may have perceived various health needs as "normal" changes with age and to be "lived with." For the remaining half, providers of health assistance within the primary group were expected to help with one-quarter of their parents' health needs, particularly

their psychological health needs. Providers of health assistance within the secondary group were expected to help with one-quarter of their parents' health needs, particularly their physical health needs.

The adult children in this sample perceived themselves to provide health assistance for more of their parents' psychological health needs than for physical and socioeconomic health needs. The professional nurse was perceived to provide minimal health assistance for health needs and of those mentioned, the health needs were traditionally within the scope of nursing practice. Health needs that required health promotion and/or health maintenance (e.g., safety problems at home) and that sometimes require intervention by professional nurses and other professionals were not specifically mentioned. Education, therefore, of adult children as to the scope and/or role of professional nursing may be necessary through increased visibility in health promotion activities involving the general public.

Observations of national trends made by recent social gerontologists (Litwak, 1965; Sussman, 1977; Treas, 1977) suggest that care of elderly persons involve both formal organizations as well as family members. Findings from this study indicate adult children do not expect providers of health assistance within primary and secondary groups to help with all of their parents' health needs. For

over half their parents' health needs, no one/no helper was expected. It is likely that adult children may need to be socialized to the "linking role," as described by Sussman (1977) as dependency needs of their parents increase in the future. The fact that aged parents were perceived to be in good health may have influenced their perceptions. From a practitioner's standpoint, should the aged parent experience a sudden, unexpected dependency, their adult children may perceive the parental need as a "family crisis."

Additional Findings: Summary of Written Comments

Based on the written comments as summarized in Chapter V, several observations can be made. Family, particularly those geographically closer, should help when parents need help. Brody (1981) cites national data to support this opinion. When family "can't or are unable to help" professional persons should be sought. Weeks (1981) notes that resources available to families with older members are limited. Other studies of adult children populations suggest that the adult child experiences difficulty providing care to their parents particularly when the care is experienced as confining (Robinson, 1979; Sparks and Brody, 1965). Some of the participants expressed difficulty responding to the questionnaire because their parents were divorced or because their parents were fairly

independent and healthy. Of particular concern was "timing" of their parents' needs since some participants expressed difficulty knowing when to help and when not to help their parents. They felt their parents should be independent for as long as possible; this may further explain why no one was expected to help for over half the health needs. Not knowing when to help may further explain difficulty anticipating future health needs and increase risks for family crisis. Health promotion and health maintenance interventions by professional nurses with adult children who desire to care for their parents may deter family crisis and enhance family coping.

Reliability and Validity of the Scales

Factor analysis was performed on each scale for the purpose of further scale refinement by grouping variables called factors that were moderately or highly correlated with one another (Table 19). The small sample size ($N = 47$) contributed to instability of factor analysis. Factor analysis is a somewhat controversial multivariate procedure because it involves a higher degree of subjectivity on the part of the investigator than ordinarily found in statistical technique (Polit and Hungler, 1978). The "naming" of factors is, therefore, essentially a process of identifying theoretical constructs by the investigator.

In Table 20 factor intercorrelations are presented and in Table 21 coefficient alphas for each factor can be seen. Intercorrelations between factors suggest that, although some statistical overlap in measurement occurred, each factor consisted of somewhat distinct concepts for practical purposes. Administration of the "new scales" or refined scales to a large number of adult children followed by factor analysis would add to validity and use of the scales for clinical purposes.

The following clusters of physical health need items suggest four theoretical constructs. Items recommended to be included in the refined scales are marked by an *.

Factor 1 - Functional limitations associated with activities of daily living:

- *14 Daytime tiredness
- * 9 Swelling of hands and/or feet
- *26 More days when they don't do their usual activities
- *18 Changes in their daily routines
- *19 Increased difficulty adapting to extreme changes
in weather
- *17 Increased difficulty doing household tasks
- * 3 Shortness of breath

Factor 2 - Changes in bodily functions

Items possibly related

- * 4 Constipation

Table 20. Intercorrelation Matrix of Factors Within Each Scale Utilized in Present Study.

Factor	1	2	3	4	5	6
<u>Physical Health Needs</u>						
1	1.00					
2	.51	1.00				
3	.58	.40	1.00			
4	.43	.25	.24	1.00		
5	.67	.74	.53	.46	1.00	
6	.63	.28	.54	.52	.64	1.00
<u>Psychological Health Needs</u>						
1	1.00					
2	.58	1.00				
<u>Socioeconomic Health Needs</u>						
1	1.00					
2	.52	1.00				

Table 21. Coefficient Alphas of Factors Within Each Scale Utilized in the Present Study.

Scale	Factor					
	1	2	3	4	5	6
Physical Health Needs	.80	.55	.74	.62	.70	.61
Psychological Health Needs	.83	.64				
Socioeconomic Health Needs	.94	.78				

* 5 A need to urinate more often

*13 Loss of balance

Items to be deleted or changed

7 Cold hands and feet

Factor 3 - Sensory deprivation

*11 A change in their ability to smell odors

*10 Increasing deafness

* 8 Numbness of hands and/or feet

*16 Problems with denture fit

*15 Difficulty chewing

Factor 4 - Changes the adult child may be experiencing

Items possibly related

*12 Visual changes

* 1 Pain and stiffness in joints

* 2 A need to reduce their calorie intake

*25 A longer time to recover from illness

Items to be deleted or changed

23 Brief awakenings during the night

Factor 5 - No theoretical construct identified

Items to be deleted or changed

20 Safety problems at home

6 Inability to hold their urine

21 Chronic health problems

Factor 6 - No theoretical construct identified

Items to be deleted or changed

24 Sleep loss

27 Symptoms of disease differently from a younger person

*Item 22 "More side effects from common medication" could be grouped with Factor 2 items.

Although the Coefficient alpha for Factor 2 was low, .55 (Table 21), factor loadings for individual items (Table 19) may account for the low coefficient alpha. For example, item 7 "cold hands and feet" has a factor loading score of .42 for Factor 2 and a factor loading score of .39 for Factor 5. Using the Factor Intercorrelation Matrix (Table 20), the intercorrelation for Factors 2 and 5 is .74 indicating statistical overlap in measurement. Therefore, item 7 "cold hands and feet" would be deleted for future use. Items were deleted from each Factor in this manner. For future use, the physical health needs scale would contain 19 items in contrast to 27 items in the original scale.

Literature on the health of older persons (Garlinghouse, 1982; Ebersole and Hess, 1981) and on "health" as a variable in the adult child/aged parent relationship (Brody, 1981; Robinson and Thurnher, 1979) support the constructs identified as Factors 1, 2, 3. As mentioned previously in the chapter, the typical adult child

participant in this study may be already experiencing the "onset" of the aging process which could influence his/her perceptions of parental health needs. Each health need variable in Factor 4 could possibly occur early in "the aging process" or after age 40 (Barrowclough and Pinel, 1981). This finding is consistent with recent speculations made by social gerontologists (Brody, 1979; Neugarten, 1979; Robinson and Thurnher, 1979; Sussman, 1979) that "aging" of the adult child may be a contributing factor to their willingness and ability to provide quality and quantity of parent-care. Findings from this study would suggest this aspect of parent-care be further investigated.

Specific physical health needs associated with disease or pathology were not clearly grouped together. This finding is different from that of the Simos study (1973) where the adult children frequently mentioned symptoms of disease or pathology as physical problems of their parents. For future studies, the investigator would recommend adding items to develop this construct. The adult children in this sample were able to identify types of physical health needs associated with overall health in addition to illness needs which are frequently the focus of traditional health care.

The following clusters of psychological health need items suggest two theoretical constructs. Items recommended

to be included in the refined scales are marked by an *.

Factor 1 - Changes in mental functions

Items possibly related

- *39 Decreased ability to cope with situations
- *36 Difficulty thinking through problems
- *35 Difficulty making up their mind
- *34 A decrease in their ability to learn new things
- *38 More times when they will act like children
- *40 A need for parent-like guidance
- *32 Feelings of uselessness

Items to be deleted or changed

- 37 Taking more time to perform routine activities

Factor 2 - Affective/Emotional changes

Items possibly related

- *29 Increased need for family closeness
- *30 Desire to reminisce
- *28 Changes in sexual and marital relations
- *33 Some degree of forgetfulness

Items to be deleted or changed

- 31 Difficulty in following any prescribed medication schedule.

For future use, the psychological health needs scale would contain 11 items in contrast to 13 items in the original scale.

Literature on perceived psychological health needs

would support the identification of these theoretical constructs (Robinson and Thurnher, 1979; Shanas, 1979; Sheinman, 1979; Simos, 1973). Changes in mental functions may possibly include related concepts as: difficulty in problem-solving skills, symptoms of pathology, or myths associated with aging. Affective changes may possibly include related concepts as: changes in interpersonal relationships, developmental tasks of older persons. The concept of grieving due to multiple loss as described by Simos (1973) was not a specific cluster; however, it must be noted that grieving due to multiple loss may include both mental and affective changes. For future studies, the investigator would recommend the addition of grieving reactions to multiple loss as a possible third factor to develop psychological health needs scale.

The following clusters of socioeconomic health need items suggest two theoretical constructs. Items recommended to be included in the refined scales are marked by an *.

Factor 1 - Economic needs

Items possibly related

- *42 Possible difficulty paying for housing
- *45 Possible difficulty paying for utility bills
- *41 Possible difficulty paying for food
- *44 Possible difficulty paying for health care services
- *46 Possible difficulty paying for social activities.

Items to be deleted or changed

- 43 Possible difficulty in ability to purchase
desired clothing
- 48 Possible difficulty arranging for health care
services

Factor 2 - Needs associated with the use of social skills

- *51 Difficulty planning a balanced diet
- *47 Possible difficulty managing personal finances
- *50 Decreased interest in current events
- *49 Decreased number of social contacts

For future use, the socioeconomic health needs scale would contain 9 items in contrast to 11 items in the original scale.

Literature on perceived socioeconomic health needs would support the theoretical construct economic needs (Shanas, 1967; 1977; Simos, 1973; Treas, 1979; Weeks, 1981). No literature was found which specifically related health needs of aged persons with the use of their social skills. This construct was added by the investigator to develop the socioeconomic health need scale. For further scale refinement, the investigator would recommend the addition of health need items that could possibly be factored with the needs associated with the use of social skills.

In summary, intercorrelations of the scales suggest that relatively separate concepts were measured by the

scales utilized in the present study. To further refine the scales, factor analysis was performed on health need items within each scale. Theoretical constructs or factors were identified and recommendations for future use of the scales were presented.

Major Research Question

How do adult children perceive health issues of aged parents as their parents grow older?

Data pertaining to the major research question and sub-questions of the present study have been presented in Chapter V. In previous sections of this chapter, descriptors of the study sample have been summarized and some conclusions have been made about each sub-question. Major study findings are enumerated in this section and will be used as the basis for nursing implications.

1. In general, the sample of adult children were middle-aged, the middle generation within the extended family system, highly educated, and of higher socioeconomic status.

2. Nearly 85% of the adult children expected their parents to experience physical and psychological health needs as they grow older and they were neutral about their parents' socioeconomic health needs.

3. Approximately 85% of the sample agreed their parents would need health assistance for their physical health needs. Only half agreed their parents would need health assistance for their psychological and socioeconomic health needs. No help was expected for nearly half their parents' total health needs.

For the remaining health needs, providers of health assistance within the primary group were expected to help with one-quarter of their parents' needs (more psychological health needs). Within the secondary group, providers were expected to help with one-quarter of their parents' needs (more physical health needs). Adult children identified themselves as providers of health assistance for more of their parents' psychological and socioeconomic health needs than for their physical health needs. The professional nurse was expected to help their parents with few health needs.

Physical, psychological, and socioeconomic health needs of aged parents were perceived differently by their adult children and health assistance was not expected for all health needs. Study findings suggest that adult children may have difficulty anticipating future health needs of their parents and whether or not health assistance would be required. It is possible that they expected their parents to care for themselves for as long as possible. If an adult child experiences

a parental need that is immediate and/or results in dependency, he/she may possibly experience a "crisis situation" depending on available resources. From a practitioner's viewpoint, adult children did not expect secondary providers of health assistance to help with all of their parents' health needs. In general, adult children did not perceive the professional nurse as a provider of health assistance which has implications for nursing practice and nursing education. The remainder of the chapter addresses nursing implications of the study findings.

Additional Limitations of the Study

In addition to the thirteen limitations of the study outlined in Chapter I, results may have been affected by other limitations.

1. The findings of this study are limited to the sample or similar samples of adult children since the selection was not random.

2. The peers of the investigator who provided names and addresses of potential participants were highly educated and the majority were white. Sampling bias may have occurred since the study sample consisted of white highly educated persons.

3. The sample of adult children consisted of highly educated persons and of a higher socioeconomic status.

Findings from this study may not be relevant to other samples of adult children who have lower educational levels and lower socioeconomic status.

4. Response bias may have occurred as a result of scale design. The scale may have forced the respondent to make a choice. Individuals may always score high or low depending on personal or situational influences. The number of individuals responding in terms of what they feel is expected of them cannot be ascertained.

Implications for Nursing Practice

The results of this study include a description of 47 adult children and their perceptions of health needs, health assistance, and providers of health assistance for their parents as their parents grow older. When study findings are considered in relation to Rogers' Principles of Homeodynamics and the nursing process as depicted in Figure 1, Chapter II, a number of implications for the practice of nursing emerge.

According to Rogers (1970) "professional practice in nursing seeks to promote symphonic interaction between man and environment, to strengthen the coherence and integrity of the human field, and to direct and redirect patterning of the human and environmental fields for realization of maximum health potential (p. 122)." The term "environment" refers to the configuration of events

external to man/human and is identified by patterns. Man/human-environment transactions are characterized by "continuous repatterning of both man/human and environment (p. 53)." Conceptually, study findings can be considered patterns of an extended family system.

The health issues described in this study involve complex, dynamic interactions within the context of the extended family system. Rogers' conceptual system is useful to establish structure and meaning to these interactions and is useful to identify new avenues of exploration. Rogers (1980) admits that "no tools adequately assess the human being in its totality (p. 176)." Application to nursing practice is limited because operational definitions to verify the Principles of Homeodynamics remain abstract. Findings of this study are related to the nursing process and are organized according to the Principles of Homeodynamics.

Principle of Resonancy

1. Physical, psychological, and socioeconomic health needs of aged parents as perceived by their adult children must be assessed separately because, based on the findings of this study, they were perceived differently. The nurse's assessment should be sufficiently detailed so as to differentiate symptoms of pathology and expected changes due to aging. Adult children in this study tended

to agree their parents would experience physical and psychological health needs as they grow older and they expected health assistance for their parents. The adult children in this sample were neutral (neither agree nor disagree) about their parents' socioeconomic health needs and they did not expect help for their parents' socioeconomic health needs. Projecting beyond the scope of this study, findings would suggest that adult children may not be aware of all their parents' health needs, particularly socioeconomic health needs. Adult children may have difficulty anticipating future health needs of their parents.

2. Persons most likely to help aged parents with their health needs must be assessed separately since, based on study findings, they were perceived differently by their adult children. For half of the parents' health needs, their adult children expected no one/no helper needed. For the remaining health needs, primary providers and secondary providers were expected to help with one-quarter respectively. To provide a basis for interventions designed to facilitate the accomplishment of filial tasks as perceived by adult children, the nurse must accurately assess persons most likely to help parents.

3. Adult children continue to be part of the helping network of older persons. Findings from this study would support this premise. The concept "helping network" of aged parents is a term not well documented in studies

of adult children. Theoretically and in practice, the nurse cannot presume adult children perceive themselves as providers of health assistance for all their parents health needs. Findings from this study suggest that adult children perceived themselves to be a provider of health assistance for approximately the same proportion of health needs as all other providers within the primary group. Additionally, they perceived themselves providing health assistance for more psychological and socioeconomic health needs of their parents than for their physical health needs.

4. The nurse can utilize the adult child's family history as a tool to identify patterns in the extended family system affecting perceptions of health issues of his/her parents. By asking the adult child to describe the relationship with his/her parents at different points in time (e.g., childhood, adulthood), assistance can be provided by the nurse to help the adult child clarify perceptions of the parents' health needs. For example, what may be considered to be senility on the part of the adult child may actually be a desire of the parent to reminisce which is a developmental task of late adulthood.

Principle of Helicy

1. The practitioner cannot assume that perceptions of adult children and perceptions of their aged parents are the same because they are members of the same extended family system. Although this study does not compare and contrast perceptions of adult children and their parents, theoretical implications would support the need for separate assessments particularly if the adult child were part of the helping network of the parent(s). Rogers (1970) notes that changing values are themselves products of helical evolution and request the negentropic nature of man/human and environment. Maintenance and promotion of health, viewed from this perspective "are more flexible, allow for greater individual differences, and are more cognizant of maturational complexities coordinate with health (p. 123)."

2. Since most adult children were middle age, the nurse must include an assessment of developmental tasks associated with middle age and family resources. Realistic options for parent-care can be identified with the adult child which would facilitate interventions designed for effective parent-care.

3. Consideration by nurses must be given to include adult children in the helping network of older persons. Adult children in this study generally agreed their

parents would experience physical and psychological health needs and they expected health assistance for them. An understanding by both the nurse and the adult child of present and expected future health needs of the parents would be necessary before any planning of health care could be mutually supportive.

4. Since the adult child is frequently the first resource used by elderly persons in times of need, the adult child may wish to familiarize him/herself with the health history of his/her parent(s). A suggested tool would be a "personal health history form" (Jepson-Taylor, 1982) that would contain present and past health problems and would be easily accessible to the adult child should new health problems arise.

5. Adult children in this study identified themselves as a provider of health assistance for more of their parents' psychological health needs followed by their socioeconomic health needs. In a nursing situation, psychological health needs of aged parents might be the initial intervention planned with the adult child who desires to provide health assistance to his/her parent(s).

6. With increasing age, dependency needs increase among older persons. The sample of adult children expected no one to help with over half their parents' health needs, yet they agreed their parents would experience health needs, and health assistance as they grow older. The

nurse may need to educate the adult child to recognize patterns of illness (i.e., signs of pathology in contrast to expected changes with aging) and when and how to utilize various providers of health assistance. For example, visual changes, notably presbycusis, is an expected change as persons age. If the parent is experiencing photosensitivity, or "tunnel vision." or pain in the eyes, pathology should be ruled out by an ophthalmologist rather than an optician. Referral may be the appropriate nursing intervention in this situation. Once health needs are identified by the nurse and adult child, the nurse can assist the adult child to intervene with their parents toward preventing, delaying, or adapting to the limitation of a health need (re-patterning). For example, the adult child might be helpful in acquiring more lamps for increased lighting to accommodate his/her parents' limited vision and at the same time minimize risks of falling.

7. One implication of this study is for the nurse to facilitate appropriate utilization of providers of health assistance. This can only be accomplished after the adult child and elderly parent(s) establish a goal that is mutually agreed on. Sussman (1977) identified a new role for kin of elderly persons as a "linkeage role" between family and bureaucratic institutions providing services to elderly persons. Results of this study would lend support to this concept. The study sample of adult

children were neutral about their parents' socioeconomic health needs and health assistance and they did not perceive their parents having difficulty living on their present income. Yet, at the same time, they perceived themselves as a provider of health assistance for 16% of their parents socioeconomic health needs. The nurse may either function as a "link" between the adult child and bureaucratic institutions or the nurse may educate the adult child regarding expectations of various agencies providing support or direct care to elderly persons (i.e., eligibility, available services). In this manner, the nurse may be able to prepare the adult child to help care for future health needs of the parents.

8. Rogers (1970) supports a cyclical process of evaluation of nursing interventions when she stated that the "dynamic nature of life signifies continuous revision of the nature and meaning of diagnostic data and concomitant revision of interventional measures (p. 125)." Although the adult children in the study sample agreed their parents would experience health needs and health assistance as they grow older, they expected no one to help for over half the health needs. Evaluation consists of "rhythmic repatterning of the individual and the environment (Falco and Lobo, 1980, p. 177)." Evaluation is a mutual assessment of goals achieved within the context of the extended family system.

Figure 2 includes a summary of areas vital to the adult child/environment assessment as conceptualized by Rogers and substantiated by study findings. Dotted lines refer to those areas not directly related to the present study, but those which must be assessed by nurses. Assessment provides the basis for regular evaluation of the adult child with aged parents so that health problems of parents are anticipated as part of the filial role.

Principle of Complementarity

1. In general, adult children were able to identify health needs of their parents, decide if health assistance would be required, and determine who would be most likely to help their parents as their parents grow older. A traditional "family history" is limited to the identification of group and personal risks generally associated with disease. Assessment of the extended family system as perceived by the adult child becomes essential for the nurse to identify patterns, increase understanding about the adult child/parent relationship, and to understand the reactions of the adult child to health needs of the parent(s) (i.e., as part of the filial role).

2. Once health needs of parents are identified, whether or not health assistance would be expected for specific health needs must be assessed. Based on study

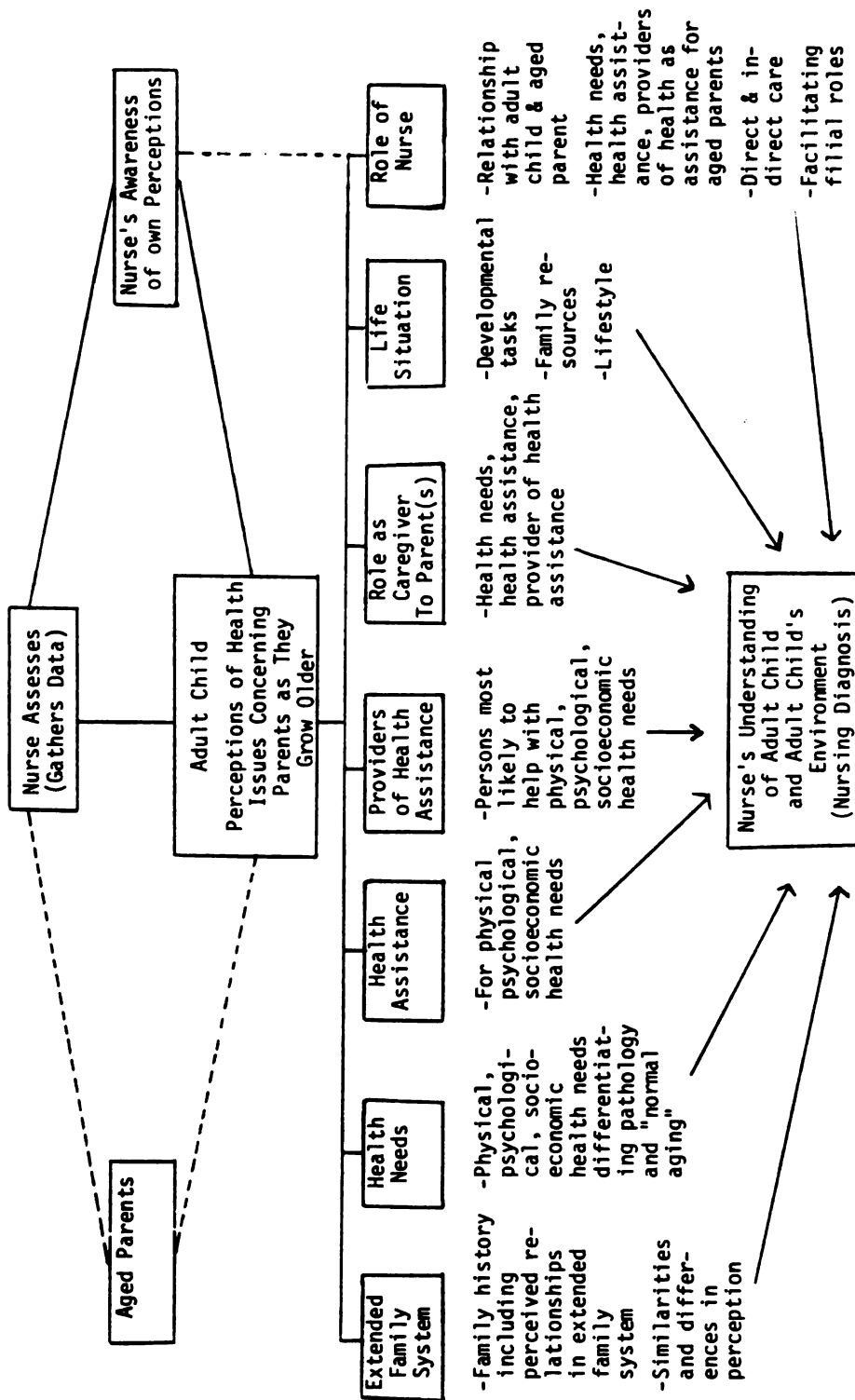


Figure 2. Nursing Assessment of the Adult Child/Environment.

findings, adult children did not expect health assistance for all of their parents' health needs.

3. The adult children who participated in this study expected minimal health assistance from the professional nurse for their parents' health needs. Assessment must include perceptions of adult children regarding the role of the professional nurse within the extended family system. On a theoretical level, a nurse must assess whether or not his/her presence is perceived by the adult child as a man/human-environment interaction described by Rogers (1970). On a practical level, a nurse must be aware that although nurses have traditionally provided health care and health assistance to elderly persons, their adult children may not be aware of the nurses' role. Nurses need to involve adult children in nursing situations with elderly persons, particularly for their health needs. The nursing profession, particularly nurses in advanced practice, may need to "market nursing care" or become more "visible" to middle-aged persons who desire to provide health care to their parents. Anticipatory guidance would be an appropriate nursing intervention.

4. For maximum health potential of the family with older members, the nurse must be cognizant that perceptions of adult children concerning health issues of their parents may differ from perceptions of the parents and other members within the extended family system.

Therefore, perceptions of each member must be assessed separately and interventions mutually agreed upon for maximum health potential of all members within the extended family system.

5. According to Rogers (1970) "the nurse is an environmental component for the individual receiving services and is always a factor in the intervention process" (p. 124). The nurse, therefore, should remain aware that as an individual interacting with an adult child, he/she may affect perceptions of the adult child. For example, from a theoretical and practical standpoint, the investigator intervened with 47 adult children who participated in this study as a human/environmental interaction described by Rogers). Based on study findings, the nurse must articulate her professional role and tasks associated with that role (i.e., coordinating, teaching, facilitating direct care) to the adult child since the adult child perceived a traditional role for the professional nurse. It is possible, based on study findings, that the adult child may not perceive him/herself as a provider of health assistance to his/her parents. In a situation like this, perhaps the appropriate intervention might be to facilitate a helping network for the parents. On the other hand, based on study findings, the nurse must not assume that the adult child does not wish to care for his/her parents.

6. Nurses must become knowledgeable about community agencies and resources available to adult children with aged parents and actively create a network of resource persons with whom to consult or collaborate. In this manner, the nurse can assist the adult child to utilize the health care system for situations other than acute, episodic care.

7. Nurses, especially those in expanded practice, must take the initiative to establish practices in settings which would allow for greater visibility as autonomous health care providers to families with older members. Referral to and participation by nurses in programs such as "As Your Parents Grow Older" (Johnson and Catalano, 1981) is an appropriate intervention supported by findings from this study and by program evaluation studies.

8. The adult children utilized in this sample were typically middle-aged adults and, therefore, the nurse must be cognizant of the limitations (i.e., available resources) that adult children have in relation to their role in parent-care. Nurses must become politically active to obtain policy changes favoring support for adult children who provide health assistance for their parents both financially and philosophically.

Implications for Nursing Education

Implications for nursing education may be drawn from study findings as they relate to the conceptual framework upon which this research was based. Fundamental concepts of the framework of this study will be presented, followed by pertinent study findings and their implications.

Patterns exist in the perceptions of adult children about health issues concerning their aged parents which are the product of their membership and interaction in the extended family system.

1. Study findings have produced a profile of the perceptions of a group of adult children about health issues concerning their aged parents. Common perceptions are enumerated in the section entitled Major Research Question on page 215. Nursing curriculum at all levels must include information regarding perceptions of adult children which are the result of many factors including structure of and interaction within the extended family system. This information is important for the nurse's understanding and involvement with adult children who desire to care for their parents. Using common perceptions as a base, the student will better understand the effect of differences encountered by individual adult children with aged parents.

2. Nurses must examine their traditional role and their own perceptions of the adult child/aged parent

relationship and about families with older members in general. Nurses need to utilize knowledge of gerontology, family, adult health to guide interventions and recognize their influence or lack of influence on perceptions of adult children.

3. Curriculum and service programs should include instruction on how to obtain information from and collaborate with community agencies. The nurse can then assume the "linkage role" between the adult child and support systems for their parents or educate the adult child as to the role. Pooling of available resources should be a priority.

4. Included in the curriculum at each level of nursing education should be material relating to middle-aged persons, their resources and limitations, who desire to provide parent-care. Too often, the nurse is socialized to institutional care of elderly persons or expect adult children to provide ongoing health assistance. Elderly persons generally prefer and use family members, particularly adult children, as their first resource when help is needed.

5. There is additionally an implication for the development of in-service programs for nurses working with families with older members to increase their understanding of adult children with whom they interact and dissemination of study findings in professional literature to accomplish

the same purpose. In the area of graduate education it is important that further research (e.g., use of refined scales) be encouraged in an effort to expand the level of understanding and add to the knowledge base of nursing.

Individual differences of perceptions about health issues concerning aged parents exist which must be assessed when planning nursing care.

1. The fact that differences in perceptions of adult children do exist and may be assessed and measured should be an integral part of the curriculum in the education of nurses at all levels. Assessment skills in these areas should be taught in both schools of nursing and in workshops and in-service programs for practicing nurses. The tools for the assessment of these differences in adult children should be shared both with practicing professionals for direct use with adult children and also with other researchers so that understanding of these differences may be advanced and added to the body of nursing knowledge.

2. Sensitization of the nurse to the specific life situation of the adult child is an equally important facet of the educational process. As Garlinghouse (1982) points out, too often clinical experience in gerontology is limited to the frail, ill elderly persons in short-term or long-term institutions. Since the majority of older persons continue good health and experience "normal aging"

outside of institutions, how much more appropriate for the student to gain clinical experience with families who have healthy, active elderly members.

3. An additional implication is for the development of standards for care of adult children who desire to provide health care for their parents which take into consideration both commonalities or patterns and the need to understand and assess differences between individuals.

Perceptions of adult children with aged parents are influenced by a number of factors and the interactions of those factors in their lives.

1. Study findings, as well as a review of pertinent literature, support the view that perceptions of adult children are influenced by numerous factors. Demographic and other descriptive variables have been used to describe adult children with results similar to other adult children samples with the exception that the sample used in the present study were highly educated, and were of higher socioeconomic status. There is a clear and strong implication for the continuation of research efforts at all levels to quantify and explain the inter-relationships among those factors which influence perception of health issues. Additionally, awareness of those factors known to influence perceptions of adult children should be included in nursing curriculum at all levels of education.

2. There is also a need for nurses to participate in community programs for education and support of adult children who desire to care for their parents in order to increase public awareness and understanding of the various roles adult children can assume in the helping network of their parents.

Implications for Nursing Research

Maximum health potential for the family with older members necessitates effective participation of the adult child in the health care of aging parents. The nurse must act to enhance health by utilizing knowledge of both patterns in perception and differences in perceptions of each adult child. While no finding in this study offers direct support for this assumption which was an integral part of the framework upon which the study was based, there are, nevertheless, implications for further research.

The American Nurses' Association (1981) identified research priorities for the current decade among which include "decreasing the negative impact of health problems on coping abilities, productivity, and life satisfaction of individuals and families" and "promoting health, well-being and competency for personal health in all age groups." A number of implications for further

research may be derived from this study and are enumerated below.

1. The use of random selection and larger sample size would increase the generalizability of findings.

2. Stricter control of the environment in which the questionnaire was completed would be recommended. Filling the questionnaire out at home in the presence of spouse or other family members may result in responses affected by social desirability bias.

3. Not only should similar samples of adult children be surveyed but researchers should seek patterns or commonalities and differences among other samples of adult children with aged parents (i.e., those with institutionalized parents or adult children with lower education levels and lower socioeconomic status). Similar results from various samples of adult children would strengthen any political effort to obtain funding for financial and support programs for adult children who desire to care for their parents.

4. The high alpha coefficients of the scales developed for the study imply that effort should be directed toward further refining the instrument to improve internal consistency and to evaluate for construct validity. Garlinghouse (1982) also obtained high alpha coefficients for similar scales used on a population of healthy older adults. Further testing on various populations and

subsequent factor analysis to identify concepts within scales utilized in the present study is recommended. Should further research prove the instrument both reliable and valid, it might be utilized in research directed toward optimizing health for all members of the extended family system.

5. For use as a practical clinical assessment tool not requiring sophisticated analysis, or for program evaluation, the instrument must be simplified and tested in various clinical settings. A checklist format rather than use of a Likert scale may be sufficient to identify individual and group needs for clinical interventions, thereby further incorporating nursing research into nursing practice.

6. Utilization of refined scales as outcome measures is recommended for evaluation of possible changes in perceptions concerning health issues of aged parents in education and support programs for adult children with aged parents.

7. Because of the present limitation of funding resources and highly competitive market for those limited funds, nurses must study and publish the cost effectiveness of involving family, primarily adult children, in the health care of older persons.

8. There is a need to formulate hypotheses to further understand under what circumstances adult children will provide health assistance to their parents, resources

and limitations of adult children in parent-care, what specific factors influence perceptions of adult children. Additionally, studies designed to compare perceptions of adult children with perceptions of their parents regarding health issues as described in this study would add valuable information upon which nurses could develop knowledgeable interventions for the family with older members. Other areas for further research include: under what circumstances are adult children able to meet their parents' health needs; what is the nature of the relationship between sons and their elderly parents?

9. There is a need for a longitudinal study of how perceptions of adult children are altered when real health needs of their parents exist.

Summary

In Chapter VI a summary and interpretation of study findings was presented. Findings were related to the conceptual framework of this study. Recommendations for nursing practice, education, and research were presented.

APPENDICES

APPENDIX A
LETTER OF EXPLANATION
WITH CHECKLIST OF CRITERIA
FOR STUDY PARTICIPANTS
GIVEN TO PEERS AND FRIENDS
OF INVESTIGATOR

Thank you for helping to identify possible participants for my study. I will need the names and addresses of persons who meet all of the "Necessary Criteria" listed below. Use the back of this sheet for this purpose and return it to me.

I will also need you to co-sign the letter that I will mail to these persons. The letter will explain the purpose of the research project, how to participate, and a consent form.

If you would like to participate in this study and you are a Registered Nurse, you may include your name and address. However, please do not suggest names of other Registered Nurses since a large number of nurse participants could seriously bias the results of this study.

As a suggestion, use this sheet as a worksheet. Simply put a check next to each item to be sure the person meets all of the necessary criteria.

CRITERIA FOR SELECTION OF ADULT CHILDREN

Necessary Criteria

1. Literate
2. Age 30 to and including 64 years.
3. One or both parents are living.
4. One or both parents are 65 years of age or older.
5. One or both parents are retired.
6. One or both parents do not live in a recognized health care institution as a nursing home or with a family member.
7. One or both parents presently live in their home or residence for senior citizens.
8. Person is not a Registered Nurse, unless it is yourself.
9. Name of person is not obtained through a recognized health care setting.

Preferences of the Investigator

1. 2 males, 2 females.
2. May live outside Michigan.

3. Prefer various occupations.
4. Prefer various ethnic backgrounds.
5. Prefer various income levels.

APPENDIX B
CO-SIGNED LETTER OF
EXPLANATION TO
STUDY PARTICIPANTS

MICHIGAN STATE UNIVERSITY

COLLEGE OF NURSING

EAST LANSING • MICHIGAN • 48824

Dear _____:

One of my nursing colleagues, Barbara Jepson-Taylor, is conducting a research project at Michigan State University on how adult children perceive health needs of their parents as they grow older and whether or not health assistance is expected. The research project is part of the requirements for a Master's Degree in Nursing, Family Clinical Nurse Specialist Program. The subject is an important one since adult children frequently care for their parents, as well as their own families, and receive little or no recognition or help from society.

I feel this subject may be of interest to you. Results of this study will be useful to help providers of health care as well as policy makers formulate decisions and policies that would enhance family support of older persons.

I want to assure you of your anonymity and the confidential nature of this study. To indicate your willingness to participate in this project, please complete the information on the back of the enclosed post-card and mail it. After receiving the post-card, a questionnaire will be mailed to you by Barbara Jepson-Taylor. The questionnaire will take approximately one-half hour to complete.

Your help is greatly appreciated.

Barbara Jepson-Taylor, R.N.
Investigator

Enclosure

APPENDIX C
LETTER OF EXPLANATION,
CONSENT FORM,
STUDY QUESTIONNAIRE

MICHIGAN STATE UNIVERSITY

COLLEGE OF NURSING

EAST LANSING • MICHIGAN • 48824

Dear Participant:

Thank you for agreeing to participate in my research project. I hope the outcome of this study will be used to enhance family support for the care of aged persons.

There are three parts to the enclosed questionnaire. Part A requests information about health problems you might expect your parent(s) to experience as they grow older. Respond to the statement the way you would expect your parent(s) to possibly experience the problem in the future. Part B requests information about activities that your parent(s) do or should do to stay healthy and overcome health problems. In Part C I have requested some additional information about you and your family.

There are no right or wrong answers. I would ask that you complete the questionnaire by yourself and that you do not consult with anyone until the questionnaire is completed.

The questionnaire will take approximately one-half hour to complete. Please return the questionnaire to me in the enclosed stamped envelope within five days. If, for any reason, you are unable to complete the questionnaire please return it to me per mail.

Attached is a Consent Form; it outlines your rights as a participant in this study. Please read it, sign it, and return it with your questionnaire.

Thank you for your help in this study.

Barbara Jepson-Taylor

Barbara Jepson-Taylor, R.N., Investigator
Candidate for Master's Degree in Nursing
Family Clinical Nurse Specialist Program

Enclosures

CONSENT FORM

In order to insure your anonymity and the confidential nature of this study, please read the following consent statements:

--I have freely consented to take part in a research study being conducted by Barbara Jepson-Taylor, R.N., Graduate Student, Family Clinical Nurse Specialist Program, College of Nursing, Michigan State University.

--I understand that I am free to discontinue my participation in the study at any time without penalty. Withdrawal from the study will not effect the care my family or myself are receiving.

--I understand that the results of the study will be treated in strict confidence and that I will remain anonymous. Within these restrictions, the general results of the study will be made available to me at request.

--I understand that my participation in this study does not guarantee any beneficial results to me directly.

--I understand that I will not be paid or receive any direct form of gratuity for participation.

Please sign to indicate your understanding of the consent statements.

Participant

INSTRUCTIONS

PART A

The following statements describe general health problems that are encountered by persons as they grow older. You are asked to decide if you expect your parent(s) to experience a particular health problem as they grow older. You are then asked to decide if you expect your parent(s) to need help with this problem and who would be the person most likely to help.

Health problems are referred to in a general way. Some of the statements may pertain to one or both of your parents and some may not. Consider each statement in a general way and decide if your parent(s) could possibly experience the problem some time in the future. There are no right or wrong answers. Choose the one best answer for each item. A sample answer is found on the back of this page, the first item.

1. As you read the statement at the top of the page, "As my parent(s) grow older, I expect them to experience," read a phrase listed in the second column (for example, BACKACHE). Decide if you strongly agree, agree, are neutral (neither agree or disagree), disagree, or strongly disagree. Circle the appropriate number in the first column.
2. Then, read the next statement at the top of the page, "I expect my parent(s) to need help with this." Decide if you strongly agree, agree, are neutral (neither agree nor disagree), disagree, or strongly disagree. Circle the appropriate number in the third column.
3. Finally, read the last statement at the top of the page, "The persons most likely to help is," and decide which of the people listed would be most likely to help with the problem or if no helper is needed. Write the appropriate letter in the fourth column on the line provided.

Although several persons could help with a particular problem, you are asked to select the person most likely to help.

11

THE PERSON MOST
LIKELY TO HELP
IS: (CHOOSE ONE)

- A. Social Worker
- B. Friend/Neighbor of my Parent(s)
- C. Counselor
- D. One of my Brothers or Sisters
- E. Physician/Dentist
- F. Myself
- G. Spouse of my Parent(s)
- H. Professional Nurse
- I. Community/Government Worker
- J. Relative of my Parent(s)
- K. Other (Please Specify)
- L. No One/No Helper Needed

SAMPLE	STRONGLY AGREE 1 2 3 4 5	AGREE 1 2 3 4 5	NEUTRAL 1 2 3 4 5	DISAGREE 1 2 3 4 5	STRONGLY DISAGREE 1 2 3 4 5
B. Friend/Neighbor of my Parent(s)					
C. Counselor					
D. One of my Brothers or Sisters					
E. Physician/Dentist					
F. Myself					
G. Spouse of my Parent(s)					
H. Professional Nurse					
I. Community/Government Worker					
J. Relative of my Parent(s)					
K. Other (Please Specify)					
L. No One/No Helper Needed					
PAIN & STIFFNESS IN JOINTS	1	2	3	4	5
A NEED TO REDUCE THEIR CALORIE INTAKE	1	2	3	4	5
SHORTNESS OF BREATH	1	2	3	4	5
CONSTIPATION	1	2	3	4	5
A NEED TO URINATE MORE OFTEN	1	2	3	4	5
INABILITY TO HOLD THEIR URINE	1	2	3	4	5
COLD HANDS & FEET	1	2	3	4	5
NUMBNESS OF HANDS AND/OR FEET	1	2	3	4	5
SWELLING OF HANDS AND/OR FEET	1	2	3	4	5
INCREASING DEAFNESS	1	2	3	4	5
A CHANGE IN THEIR ABILITY TO SMELL ODORS	1	2	3	4	5

**THE PERSON MOST
LIKELY TO HELP
IS: (CHOOSE ONE)**

- STRONGLY DISAGREE
- DISAGREE
- NEUTRAL
- AGREE
- STRONGLY AGREE

[illegible]

**I EXPECT MY
PARENT(S) TO NEED
HELP WITH THIS:**

IS: (CHOOSE ONE)
A. Social Worker

A. Social Worker
B. Friend/Neighbor of my Parent(s)
C. Counselor
D. One of my Brothers or Sisters
E. Physician/Dentist
F. Myself
G. Spouse of my Parent(s)
H. Professional Nurse
I. Community/Government Worker
J. Relative of my Parent(s)
K. Other (Please Specify)
L. No One/No Helper Needed

					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE									
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														
					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE														

-4-

AS MY PARENT(S) GROW
OLDER, I EXPECT THEM
TO EXPERIENCE:

I EXPECT MY
PARENT(S) TO NEED
HELP WITH THIS:

THE PERSON MOST
LIKELY TO HELP
IS: (CHOOSE ONE)

- A. Social Worker
B. Friend/Neighbor of my Parent(s)
C. Counselor
D. One of my Brothers or Sisters
E. Physician/Dentist
F. Myself
G. Spouse of my Parent(s)
H. Professional Nurse
I. Community/Government Worker
J. Relative of my Parent(s)
K. Other (Please Specify)
L. No One/No Helper Needed

AS MY PARENT(S) GROW OLDER, I EXPECT THEM TO EXPERIENCE:					I EXPECT MY PARENT(S) TO NEED HELP WITH THIS:					THE PERSON MOST LIKELY TO HELP IS: (CHOOSE ONE)				
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	SOME DEGREE OF FORGETFULNESS	1	2	3	4	5	32			
1	2	3	4	5	A DECREASE IN THEIR ABILITY TO LEARN NEW THINGS	1	2	3	4	5	33			
1	2	3	4	5	DIFFICULTY MAKING UP THEIR MIND	1	2	3	4	5	34			
1	2	3	4	5	DIFFICULTY THINKING THROUGH PROBLEMS	1	2	3	4	5	35			
1	2	3	4	5	POSSIBLE DIFFICULTY MANAGING PERSONAL FINANCES	1	2	3	4	5	36			
1	2	3	4	5	POSSIBLE DIFFICULTY ARRANGING FOR HEALTH CARE SERVICES	1	2	3	4	5	37			
1	2	3	4	5	CHRONIC HEALTH PROBLEMS	1	2	3	4	5	38			
1	2	3	4	5	MORE SIDE EFFECTS FROM COMMON MEDICATIONS	1	2	3	4	5	39			
1	2	3	4	5	BRIEF AWAKENINGS DURING THE NIGHT	1	2	3	4	5	40			
1	2	3	4	5	SLEEP LOSS	1	2	3	4	5	41			

PSYCHOLOGICAL

SOcioeconomic

PHYSICAL

AS MY PARENT(S) GROW OLDER, I EXPECT THEM TO EXPERIENCE:					I EXPECT MY PARENT(S) TO NEED HELP WITH THIS:					THE PERSON MOST LIKELY TO HELP IS: (CHOOSE ONE)														
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5										
STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	STRONGLY AGREE	AGREE	NEUTRAL	DISAGREE	STRONGLY DISAGREE	A. Social Worker	B. Friend/Neighbor of my Parent(s)	C. Counselor	D. One of my Brothers or Sisters	E. Physician/Dentist	F. Myself	G. Spouse of my Parent(s)	H. Professional Nurse	I. Community/Government Worker	J. Relative of my Parent(s)	K. Other (Please Specify)	L. No One/No Helper Needed			
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4						

INSTRUCTIONS

PART B

Responses for Part B are organized in the same manner as Part A. Some of the statements may pertain to one or both of your parents and some may not. There are no right or wrong answers. Choose the one best answer for each item. A sample answer is found on the back of this page, the first item.

1. As you read the statement at the top of the page, "To maintain health and overcome health problems, I feel my parent(s) should," read a phrase listed in the second column (for example, GET A FLU SHOT EVERY YEAR). Decide if you strongly agree, agree, are neutral (neither agree nor disagree), disagree or strongly disagree. Circle the appropriate number in the first column.
2. Then, read the next statement at the top of the page, "I expect my parent(s) to need help with this." Decide if you strongly agree, agree, are neutral (neither agree nor disagree), disagree or strongly disagree. Circle the appropriate number in the third column.
3. Finally, decide who the person most likely to help is and write the appropriate letter in the fourth column on the line provided.

TO MAINTAIN HEALTH
& OVERCOME HEALTH
PROBLEMS I FEEL MY
PARENT(S) SHOULD:

**I EXPECT MY
PARENT(S) TO NEED
HELP WITH THIS:**

**THE PERSON MOST
LIKELY TO HELP**
IS: (CHOOSE ONE)
A. Social Worker
B. Friend/Neighbor of my Parent(s)
C. Counselor
D. One of my Brothers or Sisters
E. Physician/Dentist
F. Myself
G. Spouse of my Parent(s)
H. Professional Nurse
I. Community/Government Worker
J. Relative of my Parent
K. Other (Please Specify)
L. No One/ No Helper Needed

					1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE										1 2 3 4 5 STRONGLY AGREE ACREE NEUTRAL DISAGREE STRONGLY DISAGREE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
1	2	3	4	5	SEEK HEALTH CARE SERVICES WHEN THEY FEEL ILL	1	2	3	4	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

TO MAINTAIN HEALTH
& OVERCOME HEALTH
PROBLEMS I FEEL MY
PARENT(S) SHOULD:

**I EXPECT MY
PARENT(S) TO NEED
HELP WITH THIS:**

**THE PERSON MOST
LIKELY TO HELP
IS: (CHOOSE ONE)**

A. Social Worker

- B. Friend/Neighbor of my Parent(s)
- C. Counselor
- D. One of my Brothers or Sisters
- E. Physician/Dentist
- F. Myself
- G. Spouse of my Parent(s)
- H. Professional Nurse
- I. Community/Government Worker
- J. Relative of my Parent
- K. Other (Please Specify)
- L. No One/ No Helper Needed

					1 2 3 4 5 STRONGLY ACREE ACREE NEUTRAL DISACREE STRONGLY DISACREE										1 2 3 4 5 STRONGLY ACREE ACREE NEUTRAL DISACREE STRONGLY DISACREE																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
1	2	3	4	5	PARTICIPATE IN THE SENIOR CITIZEN NUTRITION PROGRAM IN THEIR AREA	1	2	3	4	5																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																

PART C

The following information will help me understand which groups of persons have similar expectations of health needs for their parents as they grow older and whether or not health assistance is expected. Directions follow each question.

1. Is your mother living? (CHECK ONE)

_____ yes _____ no → GO TO QUESTION 2



1a. How old is she (WRITE IN) _____

1b. As of today, how would you describe your mother's health? (CHECK ONE)

_____ excellent _____ fair

_____ good _____ poor

1c. As of today, does your mother have any chronic health problems? (CHECK ONE)

_____ yes _____ no

If yes, what health problem(s) does she have? (WRITE IN)

1d. Is your mother working, retired, or what? (CHECK AS MANY AS APPLY)

_____ working _____ homemaker

_____ retired _____ other (WRITE IN)

GO TO QUESTION 2

2. Is your father living? (CHECK ONE)

_____ yes _____ no → GO TO QUESTION 3



2a. How old is he? (WRITE IN) _____

2b. As of today, how would you describe your father's health? (CHECK ONE)

_____ excellent _____ fair

_____ good _____ poor

2c. As of today, does your father have any chronic health problems? (CHECK ONE)

_____ yes _____ no

If yes, what health problem(s) does he have? (WRITE IN)

2d. Is your father working, retired, or what? (CHECK AS MANY AS APPLY)

_____ working _____ homemaker

_____ retired _____ other (WRITE IN)

3. In what kind of dwelling do your parent(s) live? (CHECK ONE)
- _____ house _____ senior citizen residence
 _____ apartment _____ institution
 _____ condominium _____ other (WRITE IN) _____
4. Do your parent(s) live alone or with family members (e.g. their children, relatives)? (CHECK ONE)
- _____ live alone or with spouse
 _____ live with family
 _____ other (SPECIFY) _____
5. In general, how hard or difficult is it for your parent(s) to live on their present income? (CHECK ONE)
- _____ very difficult _____ somewhat difficult
 _____ fairly difficult _____ not too difficult
 _____ no difficulty at all
6. How many living parents do you have? (WRITE IN) _____
- 6a. If married, what is the total number of living parents between you & your spouse? (WRITE IN) _____

7. In general, what is the usual type and the frequency of contact you have with your parent(s) (CHECK AS MANY AS APPLY)

_____ TELEPHONE

_____ nearly every day _____ about 3-4 times a year
 _____ about every week _____ about once a year
 _____ about once a month _____ never

_____ LETTER/MAIL

_____ nearly every day _____ about 3-4 times a year
 _____ about every week _____ about once a year
 _____ about once a month _____ never

_____ VISITING

_____ nearly every day _____ about 3-4 times a year
 _____ about every week _____ about once a year
 _____ about once a month _____ never

8. What is the estimated number of miles you live from your parent(s) home? (WRITE IN) _____

The last set of questions refer to you and your family.

9. When were you born? (WRITE IN)

_____ month _____ day _____ year

10. What is your sex? (CHECK ONE)
 ___ male ___ female
11. What is your marital status? (CHECK ONE)
 ___ married ___ divorced
 ___ single, ___ widowed
 ___ never married
 ___ separated
12. What is your racial or ethnic background?
 (CHECK ONE)
 ___ White ___ Hispanic
 ___ Black ___ Oriental
 ___ American ___ Other (SPECIFY)
 ___ Indian
13. In your family of origin, are you the
 youngest child, oldest child, or what?
 (CHECK ONE)
 ___ youngest child ___ only child
 ___ oldest child ___ a middle child
14. Are you working now at a regular job?
 (CHECK ONE)
 ___ yes ___ no → CHECK ONE
 ↓
 ___ full-time ___ unemployed or
 ___ part-time ___ laid off
 ___ homemaker ___ disabled
 ↓
 ___ other (SPECIFY)
- GO TO QUESTIONS
 14a & 14b
- 14a. What is the main occupation you
 work at? (What type of work do you
 do?) (WRITE IN)

- 14b. What kind of business or industry is
 that in? (What do they make or do?
 Is it your own business?) (WRITE IN)

15. How much schooling have you had (highest grade
 completed)? (CHECK ONE)
 ___ none or some grammar school (up to 6th grade)
 ___ junior high school (7-9th grade)
 ___ some high school (10-12th grade)
 ___ graduated, high school
 ___ technical, business, or trade school
 ___ some college (less than 4 years completed)
 ___ associate degree completed
 ___ graduated college (4 years completed)
 ___ post graduate or professional
- GO TO QUESTION 15

16. Is your spouse working now at a regular job? (CHECK ONE)

not applicable → GO TO QUESTION 18

yes no → (CHECK ONE)

↓ unemployed or

↓ laid off

↓ disabled

↓ homemaker

↓ other (SPECIFY)

↓

GO TO QUESTIONS

16a & 16b

GO TO QUESTION 17

16a. What is the main occupation your spouse works at? (What type of work does your spouse do?) (WRITE IN)

16b. What kind of business or industry is that in? (What do they make or do? Does your spouse own the business?) (Write IN)

17. How much schooling has your spouse had (highest grade completed)? (CHECK ONE)

none or some grammar school (up to 6th grade)

junior high school (7-9th grade)

some high school (10-12th grade)

graduated high school

technical, business or trade school

some college (less than 4 years completed)

associate degree completed

graduated college (4 years completed)

post-graduate or professional

18. Taking all sources of money into consideration, what was your family's combined income before taxes and other deductions in 1981? (CHECK ONE)

less than \$5,000 \$20,000 to \$24,999

\$5,000 to \$9,999 \$25,000 to \$29,999

\$10,000 to \$14,999 \$30,000 to \$34,999

\$15,000 to \$19,999 \$35,000 to \$39,999

\$40,000 or over

19. In general, how hard or difficult is it for you & your family to live on your present income? (CHECK ONE)
- ___ very difficult ___ not too difficult
 ___ fairly difficult ___ no difficulty
 ___ somewhat difficult ___ at all
20. How many children, including adopted and step children, do you have? (WRITE IN, IF NONE, WRITE 0) _____
21. What are the ages of your children? (WRITE IN) ___ not applicable
- ___ child 1 ___ child 3 ___ child 5
 ___ child 2 ___ child 4 ___ child 6
22. As of today, how would you describe your health? (CHECK ONE)
- ___ excellent ___ fair
 ___ good ___ poor
23. As of today, do you have any chronic health problem(s)? (CHECK ONE)
- ___ yes ___ no

- 23a. If yes, what health problem(s) do you have? (WRITE IN)
- _____
- _____

24. As of today, do any members of your household have any chronic health problems? (CHECK ONE)

___ yes ___ no

- 24a. How many persons? (WRITE IN) _____

- 24b. What health problem(s)? (WRITE IN)
- _____
- _____

Thank you for taking the time to complete this questionnaire. Please return it as soon as possible in the envelope provided.

Please feel free to write any comments you have on the back of this page.

Barbara Jepson-Taylor, R.N.

B.J.-T.

REFERENCES

REFERENCES

- Ahammer, I., and Bates, P. (1972). Objective vs. Perceived age differences in personality: How do adolescents, adults, and older people view themselves and each other? Journal of Gerontology, 27(1), 46-51.
- American Nurses' Association (1981). Research priorities for the 1980's: Generating a scientific basis for nursing practice. American Nurses' Association Publication.
- Ames, B. (Nov. 19-23, 1982). Parent-caring by adult offspring. Papers presented at the 35th annual scientific meeting of the Gerontological Society of America, Boston, Mass.
- Archbold, P. (1982, Summer). An Analysis of parent-caring by women. Home Health Care Quarterly, 3(2), 5-25.
- Babchuk, N. (1978-79). Aging and primary relations. International Journal of Aging and Human Development, 9(2), 137-151.
- Barrowcough, F., and Pinel, C. (1981). The process of aging. Journal of Advanced Nursing, 6, 319-325.
- Bednarz, P. (1980). The marital dyads perception of the impact of a Mastectomy on family functioning eight to sixteen weeks post-surgery. Unpublished master's thesis, Michigan State University, College of Nursing, East Lansing, MI.(198
- Bengston, V. (1979). Research perspectives on intergenerational interaction. In P. K. Ragan (Ed.), Aging parents. The Ethel Percy Andrus Gerontology Center, California: University of Southern California Press.
- Bengston, V., Olander, E., Haddad, A. (1970). The "generation gap" and aging family members: toward a conceptual model. In Jaber P. Bukriun (Ed.), Time Roles and Self., Human Science Press, New York, p. 237-263.

- Blenkner, M. (1965). Social work and family relationships in later life with some thoughts on filial maturity. In E. Shanas & G. Streib (Eds.), Social structure and the family: Generational relations. Englewood Cliffs, N.J.: Prentice-Hall, 1965.
- Borg, W. and Gall, M. (1979). Educational research. N.Y.: Longman, Inc.
- Borlandd, D. (1978). Research on middle age: An assessment. The Gerontologist, 18(4), 379-386.
- Brody, E. (1981). Women in the middle and the family help to older people. The Gerontologist, 21(6), 471-479.
- Brody, E., Davis, L. J., Fulcomen, M., Johnson, P. (1979, Nov. 25 - 29). Three generations of women: Comparisons of attitudes and preferences for service providers. Paper presented at the 32nd annual meeting of the Gerontological Society, Washington, D.C.
- Brody, E. (1979). Aged parents and aging children. In P. K. Ragan (Ed.), Aging parents. The Ethel Percy Andrus Gerontology Center, California: University of Southern California Press.
- Brody, S. et al. (1978, December). The family caring unit: A major consideration in the long-term support system. The Gerontologist, 18(6), 556-561.
- Brody, S. J. (1973). Comprehensive health care of the elderly: an analysis. The Gerontologist, 13, 412-418.
- Bubolz, M., Eicher, J. B., and Sontag, M. S. (1979). The Human Ecosystem: A Model. Journal of Home Economics, Spring, 28-31.
- Cantor, M. H. (1975, February 23-27). Life space and the social support system of the inner city elderly of New York. The Gerontologist.
- Cohen, S. and Gans, B. (1978). The other generation gap. Chicago: Follett Publishing Co.
- Collette-Pratt, C. (1976). Attitudinal predictors of devaluation of old age in a multigenerational sample. Journal of Gerontology, 31(2), 193-197.
- Crano, W. and Brewer, M. (1973). Principles of research in social psychology. N.Y.: McGraw-Hill Co.

Current Population Reports (1981, March). (Series P-20, No. 371.) Household and family characteristics: U.S. Dept. of Commerce, Bureau of the Census.

Davis, R. (1981). The middle years. In R. Davis (Ed.), Aging: Prospects and Issues. University of Southern California, Los Angeles, California: Monograph published by Ethel Percy Andrus Gerontology Center.

Diekelmann, N. (1977). Primary health care of the well adult. N.Y.: McGraw-Hill Book, Co.

Dowd, J. J. (1980). Exchange rates and older people. Journal of Gerontology, 35(4), 596-602.

Duvall, E. (1971). Family development, 4th edition. Philadelphia: J. B. Lippincott.

Ebersole, P. and Hess, P. (1981). Toward healthy aging: Human needs and nursing response. St. Louis: The C. V. Mosby, Co.

Egerman, L. (1966, June). Attitudes of adult children toward parents and parents' problems. Geriatrics, 26(6), 217-222.

English, J. (1979). What do grown children owe their parents? In O. O'Neill and W. Ruddick (Eds.), Having children. N.Y.: Oxford University Press.

Falco, S. and Lobo, M. (1980). Martha E. Rogers. In J. B. George (Eds.), Nursing Theories: The Basis for Professional Nursing Practice. New Jersey: Prentice-Hall, Inc.

Fandetti, D. V. and Gelfand, D. E. (1976). Care of the aged: Attitudes of white ethnic families. Gerontologist, 16(6), 544-549.

Garlinghouse, C. (1982). The perceived health needs and stated performance of health activities of older adults and their expectations of assistance from health care providers. Unpublished Master's thesis Michigan State University, College of Nursing, East Lansing, MI.

Gift, H. (1979). The 7th age of man: Oral health and the elderly. Journal of American College of Dentists, 46(4), 204-213.

Green, S. K. (1981). Attitudes and perceptions about the elderly: Current and future perspectives. International Journal of Aging and Human Development, 13(2), 99-119.

- Hake, J. C. (1978). Health maintenance and disease prevention. In C. J. Leitch and R. V. Tinker (Eds.), Primary Care. Philadelphia: F. A. Davis Co.
- Halprin, F. (1979). Patterns of influence between middle aged children and their parents. Paper presented at the annual meeting of Gerontological Society, Washington, D.C.
- Havighurst, R. J. (1948). Developmental tasks and education. Chicago: Chicago University Press.
- Hess, B. and Waring, J. (1978, October). Changing patterns of aging and family bonds in later life. The Family Coordinator, 303-314.
- Hirschfield, I. S. (1979). Perspectives. In P. K. Ragan (Ed.), Aging parents. The Ethel Percy Andrus Gerontology Center, California: University of Southern California Press.
- Jepson-Taylor, B. (1982). A personal health history form. Unpublished material, Michigan State University College of Nursing, East Lansing, MI.
- Johnson, C. L. and Catalano, D. J. (1981). Childless elderly and their supports. Gerontologist, 21(6), 610-618.
- Johnson, E. S. and Spence, D. L. (1982, January). Adult children and their aging parents: An intervention program. Family Relations, 31, 115-121.
- Johnson, E. S. (1978). "Good" relationships between older mothers and their daughters: A causal model. Gerontologist, 18(3), 301-306.
- Johnson, E. S. and Bursk, B. (1977). Relationships between the elderly and their adult children. The Gerontologist, 17(1), 90-96.
- Jonas, K. and Wellin, E. (1980). Dependency and reciprocity: Home health aid in an elderly population. In C. L. Fry (Ed.), Aging in culture and society: Comparative viewpoints and strategies. J. F. Bergin Publisher.
- Kalish, R. (1975). Late adulthood: Perspectives on human development. Monterey, California: Brooks/Cole Publishing, Co.

- Kent, D. and M. Matson (1972). The impact of health on the aged family. The Family Coordinator, 21, 29-36.
- King, I. (1981). A theory of nursing. N.Y.: Wiley Medical Publication.
- King, S. (1982). Interrelationships of knowledge of disease, knowledge of treatment, social support, perceived impact of disease and stated compliance in a group of patients with COPD. Unpublished Master's thesis, Michigan State University, College of Nursing, East Lansing, MI.
- Kovar, V. G. (1977). Health of the elderly and use of health services. Public Health Reports, 72(1), 9-19.
- Levinson, D. J. (1978). The seasons of a man's life. N.Y.: Alfred A. Knopf.
- Litman, T. J. (1974). Health care and the family: A three generational analysis. In M. B. Sussman (Ed.), Sourcebook in marriage and family.
- Litwak, E. (1965). Extended kin relations in an industrial society. In E. Shanas and G. F. Streib (Eds.), Social structure and the family: Generational relations. Englewood Cliffs, N.J.: Prentice-Hall.
- Lopata, H. Z. (1978, May). Contributions of extended families to the support systems of metropolitan area widows: Limitations of the modified kin network. Journal of Marriage and Family, 40(2), 355-365.
- Luker, K. A. (1981). An overview of evaluation research in nursing. Journal of Advanced Nursing, 6, 87-93.
- Markides, K. S., Costley, D. S., Rodriguez, L. (1981). Perception of intergenerational relations and psychological well being among elderly Mexican Americans: A causal model. International Journal of Aging and Human Development, 13(1), 43-52.
- Medinger, F. and Varghese, R. (1981). Psychological growth and the impact of stress in middle age. International Journal of Aging and Human Development, 13(4), 247-263.
- Neugarten, B. (1979). The future and the young-old. In A. Monk (Ed.), The age of aging. Buffalo, N.Y.: Prometheus Books.

- Olsen, J. K. (1980, March). Helping families cope. Journal of Gerontological Nursing, 6(3), 152-154.
- Palmore, E., Cleveland, W. P., Nowlen, J. Ramm, D. E. Suijler, I. (1979). Stress and adaptation in later life. Journal of Gerontology, 34(6), 841-851.
- Pegals, C. C. (1980). Health care and the elderly. Rockville, Maryland: An Aspen Publication.
- Peterson, J. A. (1979). The relationship of middle aged children and their parents. In P. K. Ragan (Ed.), Aging Parents. The Ethel Percy Andrus Gerontology Center, California: University of Southern California Press.
- Polit, D. F. and Hungler, B. P. (1978). Nursing research: Principles and methods. Philadelphia: J. B. Lippincott, Co.
- Rautman, A. L. (1962, January). Role reversal in Geriatrics. Mental Hygiene, 46(1), 116-120.
- Robinson, B. and Thurnher, M. (1979). Taking care of aged parents: A family cycle transition. The Gerontologist, 19(6), 586-593.
- Rogers, M. (1982, May). Lecture and Interview. Michigan State University, College of Nursing, East Lansing, MI.
- Rogers, M. (1980). Nursing: A science of unitary man. In J. Riehl and S. Roy (Eds.), Conceptual models for nursing practice. N.Y.: Appleton-Century-Crofts.
- Rogers, M. (1970). An introduction to the theoretical base of nursing. Philadelphia, Pa.: F. A. Davis.
- Roscow, I. (1976). Status and role changes through the life span. In R. H. Binstock and E. Shanas (Eds.), Handbook of aging and the social sciences. N.Y.: Van Nostrand Reinhold, Co.
- Rosenmayer, L. (1977). The family -- a source of hope for the elderly. In E. Shanas and M. Sussman (Eds.), Family, bureaucracy and the elderly. Durham, N.C.: Duke University Press.
- Rossi, A. (1980). Life span theories and women's lives. Journal of Women in Culture and Society.

Seelbach, W. C. and Hansen, C. J. (1980, January). Satisfaction with family relations among the elderly. Family Relations, 29(1), 91-95.

Seelbach, W. C. (1978, October). Correlates of aged parents filial responsibility expectations and realizations. The Family Coordinator, 29(1), 341-349.

Seelbach, W. C. (1980, March-October). Filial responsibility among aged parents: A racial comparison. Journal of Minority Aging, 5(2), 286-292.

Shanas, E. (1980, February). Older people and their families: The new pioneers. Journal of Marriage and the Family, 9-15.

Shanas, E. (1979, February). Social myth as hypothesis: The case of the family relations of old people. The Gerontologist, 19(1), 3-9.

Shanas, E. (1979). The family as a social support system in old age. The Gerontologist, 19(2), 10-174.

Shanas, E. and Sussman, M. B. (1977). Family and bureaucracy: Comparative analyses and problematics. In E. Shanas and M. B. Sussman (Eds.), Family, Bureaucracy, and the Elderly. Durham, N.C.: Duke University Press.

Shanas, E. (1967). Family help patterns and social class in three countries. Journal of Marriage and the Family, 29, 257-266.

Shanas, E. (1960). Family responsibility and the health of older people. Journal of Gerontology, 15, 408-411.

Silverman, A. et al. (1977, March). A model for working with multigenerational families. Social Casework, 131-135.

Silverstone, B. and Hyman, H. K. (1982). You and your aging parent. N.Y.: Pantheon Books.

Silverstone, B. (1979). Issues for the middle generation: responsibility adjustment and growth. In P. K. Ragan (Ed.), Aging parents. The Ethel Percy Andrus Gerontology Center, California: University of Southern California Press.

Simos, B. G. (1973, May). Adult children and their aging parents. Social Work, 18(3), 78-85.

Smith, L. S. (1979). Kinkeeping in the middle generation: The effects of role strain. Paper presented at Gerontological Society, Washington, D.C.

Society Today (1971). Del Mar, California: Communications Research Machines, Inc.

Spark, G. and Brody, E. (1965, September). The aged are family members. Family Process, 4(3), 195=211.

Stehouwer, J. (1965). Relations between generations and the three-generation household in Denmark. In E. Shanas and G. F. Streib (Eds.), Social structure and the family: generational relations. Englewood Cliffs, N.J.: Prentice-Hall.

Steinman, L. (1979). Reactivated conflicts with aging parents. In P. K. Ragan (Ed.), Aging parents. The Ethel Percy Andrus Gerontology Center, California: University of Southern California Press.

Stevenson, J. S. (1977). Issues and crises during middlence. N.Y.: Appleton-Century-Crofts.

Streib, G. F. (1976). Older families and their troubles: Familial and social responses. In R. Atchley and M. M. Seltzer (Eds.), The sociology of aging: selected readings. Belmont, California: Wadsworth Publishing Co.

Sussman, M. B., Vanderwyst, D., Williams, G. K. (1979). Will you still need me, will you still feed me when I'm 64? In A. Monk (Ed.), The age of aging. Buffalo N.Y.: Prometheus Books.

Sussman, B. M. (1977). Family, bureaucracy, and the elderly individual: an organizational/linkage perspective. In E. Shanas and M. B. Sussman (Eds.), Family, bureaucracy, and the elderly. Durham, N.C.: Duke University Press.

Sussman, M. B. (1965). Relationships of adult children with their parents in the U.S. in E. Shanas and G. Streib (Eds.) Social structure and the family. Englewood Cliffs, N.J.: Prentice-Hall.

Treas, J. (1979). Family support systems for the aged: Some social and demographic considerations. In A. Monk (Ed.), The age of aging. Buffalo, N.Y.: Prometheus Books.

- Treas, J. (1977). Family support systems for the aged: some demographic considerations. The Gerontologist, 17(6), 486-491.
- Townsend, P. (1976). Integration and family. In R. Atchley and M. M. Seltzed (Eds.), The sociology of aging: selected readings. Belmont, California: Wadsworth Publishing Co., Inc.
- Townsend, P. (1965). The effects of family structure on the likelihood of admission to an institution in old age: The application of a general theory. In E. Shanas and G. F. Streib (Eds.), Social structure and the family: Generational relations. Englewood Cliffs, N.J.: Prentice-Hall.
- Troll, L. E. (1980). Intergenerational relations in later life: A family system approach. In N. Datan and N. Lohmann (Eds.), Transitions of aging. N.Y.: Academic Press.
- U.S. Department of Health, Education, and Welfare, Public Health Service (1966-1968, July). Home care for persons 55 and over in the United States, (Series 10, #73).
- Ward, R. (1978, October). Limitations of the family as a supportive institution in the lives of the aged. The Family Coordinator, 365-373.
- Weeks, J. and Cuellar, J. B. (1981). The role of family members in the helping networks for older people. The Gerontologist, 21(4), 388-294.
- Weishaus, S. (1979). Aging is a family affair. In P. Ragan (Ed.), Aging parents. The Ethel Percy Andrus Gerontology Center, California: University of Southern California Press.
- Whelton, B. (1979). An operationalization of Martha Rogers' theory and throughout the nursing process. International Journal of Nursing Studies, 16, 7-20.