The effect of daily hassles, reported managerial behavior, family adaptability and cohesion on family health

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The effect of daily hassles, reported managerial behavior, family adaptability and cohesion on family health

Garrison, Mary Elizabeth, Ph.D.

Iowa State University, 1990
The effect of daily hassles, reported managerial behavior, family adaptability and cohesion on family health

by

Mary Elizabeth Garrison

A Dissertation Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of

DOCTOR OF PHILOSOPHY

Major: Family Environment

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For the Major Department

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For the Graduate College

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1990

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CHAPTER 1. INTRODUCTION

Family resource management has been declared an area of critical importance for families and family research (Berger, 1984; Key & Firebaugh, 1989; McCubbin, Joy, Cauble, Comeau, Patterson, & Needle; 1980; Owen, 1988; and Rettig & Everett, 1982). Current understanding of the process of family management is limited, however. There are few comprehensive empirical studies that examine all components of family management. In order to better understand this critical area of family functioning, the current study assesses the relationships among all components of the Deacon and Firebaugh (1988) family resource management theoretical framework.

The components of the Deacon and Firebaugh model are inputs, transformations and outputs. Inputs are stimuli received from the family's environment, either internal or external. Transformations are the family's actions and/or reactions to the stimuli. Outputs are the responses or outcomes (Rice & Tucker, 1986). In the current study inputs are represented by daily hassles; transformations are represented by reported managerial behavior, family adaptability, and family cohesion; and outputs are represented by family health symptomology.
In this chapter, the purpose of the current study will be presented and the need for the current study will be explained. Lastly, the theoretical model of the present study will be described.

The Purpose of the Study

The purpose of this study is to empirically examine a comprehensive model of family resource management. The most recent family resource management conceptual framework, Deacon and Firebaugh (1988), provides the theoretical model of the current study.

Empirical studies in family resource management rarely investigate models that include all components of the Deacon and Firebaugh conceptual framework. The current study draws upon another area of study, family stress, to find pertinent indicators so that all components of the Deacon and Firebaugh theoretical framework are represented in the empirical model of the current study.

Family resource management has been defined as consciously directed change as well as the conscious adaptation to change (Rettig & Everett, 1982). In the current study, family resource management is defined as the process of thoughts and actions through which resources
are used to respond to either expected or unexpected changes (Deacon & Firebaugh, 1988).

The primary theoretical proposition of this study is that family well-being as measured by family health symptomology is influenced by daily hassles, but the influences of these stressors is mediated by the transformations of managerial behavior, family adaptability and family cohesion.

The Need for the Study

This study is needed because it applies a recently revised family resource management theoretical model. In their latest conceptualization, Deacon and Firebaugh (1988) more fully develop the family system and expand upon the processes of the personal subsystem. Due to the recentness of the latest Deacon and Firebaugh family resource management model, studies that use this conceptualization (1988) as the theoretical framework have not been conducted.

The current study is also important because it applies the entire Deacon and Firebaugh theoretical model, not just a part of their model. The input-to-output relationship is examined in the current study as well as the
input-to-transformation-to-output relationship. Current studies in family resource management usually include an indicator of transformation, and limit their examination to either the implicit input-to-output relationship, the transformation-to-output relationship, or the effect of socioeconomic-demographic characteristics on transformations. Two recent exceptions to this practice are Hira and Mueller (1987) and Titus, Fanslow and Hira (1989).

Another reason the current study is important is that it expands the scope of family resource management. The scope of family resource management is expanded by using variables from another area of study, family stress. This type of integration has been recommended by several family scholars (Arcus, 1987; Boss, 1987; Constantine, 1986; Hill, 1984; McCubbin et al., 1980; Nye, 1988; Owen, 1988; and Sprey, 1988). In the current study, variables new to family resource management studies will be incorporated into each component of the Deacon and Firebaugh model.

In the input component, studies in family resource management have not used indicators of stressors, such as daily hassles, to represent family goals and events. The use of daily hassles as inputs will allow the assessment of the impact daily stressors on the process of family
management.

In the transformation component of the current study, the use of family adaptability and family cohesion along with reported managerial behavior broadens the scope of family resource management. Current research in family resource management has not included either family adaptability or family cohesion as variables. Deacon and Firebaugh (1988) identify family adaptability and family cohesion as important indicators of transformations. By using all three variables to represent transformations, the relative importance of each variable to the model can be evaluated.

In the output component, the use of family health symptomology, although used extensively in family stress studies, is unique to family resource management studies. This variable is important to the present study because it measures an aspect of family well-being rather than individual well-being. In the creation of this variable, the health symptomology of each family member as perceived by the respondent is included.
The Theoretical Framework of the Current Study

Since the 1970s, Deacon and Firebaugh have used systems theory concepts to build their conceptual framework of family resource management. The Deacon and Firebaugh (1988) conceptual framework was selected for several reasons. One of these reasons is that other family resource management models either adapt an earlier Deacon and Firebaugh (1981) model (Rice & Tucker, 1986) or have not been revised for several years (Gross, Crandall & Knoll, 1980; Paolucci, Hall & Axinn, 1977).

Another reason the Deacon and Firebaugh conceptualization of family resource management was selected over other family resource management models is because it lends itself more readily to empirical specification. Its precise delineation of the managerial process allows testing of specific relationship between and among elements (Heck & Douthitt, 1982).

Deacon and Firebaugh (1988) view family resource management as a process with inputs, transformations and outputs (Figure 1). They divide the family system into two subsystems: personal and managerial. Through the personal subsystem human capacities are developed and experiences and understanding are translated into meanings. In the managerial subsystem, families acquire and use resources to
Figure 1. The Deacon and Firebaugh (1988) Conceptual Model
respond to and/or meet family demands.

For each subsystem, inputs, transformations, and outputs are conceptualized. According to Deacon and Firebaugh, inputs are matter, energy and information that enter a system in various forms to affect the transformation processes in the achievement of outcomes or outputs (1988, p. 263). Transformations (or throughputs) of the family system are matter, energy, or information changed by a system from input to output (p. 265). Outputs of the family system are the various forms of matter, energy or information produced in response to input and transformation processes (p. 264).

Inputs

According to Deacon and Firebaugh, inputs into a family system are demands and resources. Demands are inputs that provide the stimulus, motivation, and meaning to the activity undertaken by the family (1988, p. 16). Deacon and Firebaugh classify demands into goals and events.

Goals as defined by Deacon and Firebaugh are value-based objectives that give direction and orientation to action (1988, p. 46). They discuss long-term and short-term goals; goals that require continuous effort and attention; and goals that only involve brief or sporadic
concentration. They also recognize the interdependence of family goals. By their definition, Deacon and Firebaugh imply that goals are desired or anticipated occurrences that come from within the family system.

On the other hand, events as defined by Deacon and Firebaugh are unexpected and often times undesirable occurrences that require familial response (1988, p. 49). Deacon and Firebaugh identify two types of events: (1) unexpected occurrences that cause delays or adjustments to family life (minor events), and (2) unexpected occurrences that change the direction or focus of family functioning (major events). Having unexpected visitors or losing one's billfold are examples of minor events. Turbulent weather or severe illness of a family member are examples of major events.

Events can either originate inside the family system or outside the family system. The previous examples of losing one's billfold and an ill family member originated inside the family system. The earlier examples of unexpected visitors and turbulent weather were initiated outside the family system.

The authors observe that the same event can be perceived differently by different families (Deacon & Firebaugh, 1988, p. 49). The same event may be treated as a
minor event by a particular family and as a major event by another family depending upon the values and resources of each family.

Resources are defined by Deacon and Firebaugh as the means capable of meeting the demands placed upon the family (1988, p. 265). They identify both human and material resources. Human resources are defined as all the means that are vested in people than can be used to meet demands. The authors list cognitive insights, psychomotor skills, affective attributes, health, energy, and time as examples of human resources. Material resources are non-human means for meeting goals and events. Deacon and Firebaugh list consumption goods, housing, household capital, physical energy, money, and investments as examples of material resources (Deacon & Firebaugh, 1988, p. 52).

It is important to note that in the input component of the managerial process, resources are not being assessed or allocated. Rather, information concerning the stock of resources available for familial response to goals or events enters into the family system.

Transformations

In the transformation component of the family system, Deacon and Firebaugh (1988) further divide the personal and
managerial systems. According to Deacon and Firebaugh, the personal subsystem contributes values and/or goal orientations, and human capacities that support managerial processes. The managerial subsystem provides the situational context and experiences from which personal development progresses (Deacon & Firebaugh, 1988, p. 21).

The personal and managerial systems are mutually supportive of and for each other. The personal system limits or enhances responses to given managerial processes through emotional or physical influences (e.g., feeling up or down). The managerial system limits or enhances personal growth and development through planning and implementing processes (Deacon & Firebaugh, 1988, p. 21).

The Personal subsystem The personal system represents the composite of social-psychological-physiological-spiritual development that gives integrity to management (Deacon & Firebaugh, 1988, p. 21). Deacon and Firebaugh (1988) identify the concepts of family adaptability and family cohesion as important factors of family transformations in the personal subsystem (Olson, McCubbin, Barnes, Larsen, Muxen & Wilson, 1983a).

Family adaptability is defined as the ability of a family system to change its power structure, role
relationships, and relationship rules in response to situational and developmental changes (Olson, Sprenkle & Russell, 1983b). According to Olson and McCubbin (1982), a variety of concepts are used to measure family adaptability. These concepts include family power (assertiveness, control, discipline), negotiation style, role relationships, and relationship rules. They identify four levels of family adaptability. These levels are rigid, structured, flexible and chaotic. The continuum of this variable ranges from low adaptability (rigid) to high adaptability (chaotic).

Family cohesion is defined as the emotional bonding family members have with one another and the degree of individual autonomy a person experiences in the family system (Olson et al., 1983a). Olson et al. (1983b) identify several concepts that are used to measure family cohesion. These concepts are emotional bonding, independence, decision making, interests, and recreation. The four levels of family cohesion are enmeshed, connected, separated, and disengaged. The continuum of this variable ranges from low cohesion (disengaged) to high cohesion (enmeshed).

The Managerial subsystem The Deacon and Firebaugh (1988) conceptual framework more fully develops the concepts and components of the managerial subsystem than those of the personal subsystem. In fact, until their most recent
The managerial subsystem is divided into two stages: planning and implementation. As defined by Deacon and Firebaugh, planning is the process of using cognitive skills to envision what is to be done to respond to or meet a family goal or event (1988, p. 76).

The planning stage is represented by a series of decisions that involve standard setting and action sequencing. Standard setting occurs when measures of required quality and/or quantity are reconciled with family inputs (goals, events and resources) (Deacon & Firebaugh, 1988, p. 76).

Preliminary to standard setting is the clarification of goals and events and the determination of available resources. Goal or event clarification occurs when objectives are refined or specified (Deacon & Firebaugh, 1988, p. 76).

Resource assessment is the analysis of potential means to meet particular goals and/or events. Assessing resources begins with the recognition of available resources and if the need arising, consideration of ways of increasing resources (Deacon & Firebaugh, 1988, p. 78). Action
sequencing is the process of the ordering of an activity or specifying succession among activities (Deacon & Firebaugh, 1988, p. 81).

The implementation stage of the managerial subsystem involves actuating plans and procedures and controlling the ensuing actions. Actuating is the process of putting a plan or procedures into action (Deacon & Firebaugh, 1988, p. 93).

Controlling is checking the action to the standards and sequences. The processes for monitoring and adapting to situational factors while the plan is actuated are identified as checking and adjusting. Checking on action and outcomes is needed to assure progress toward reaching a goal. Adjusting actions maybe necessary to accomplish the goal or respond to an event as reflected in the plan of action (Deacon & Firebaugh, 1988, p. 95).

Outputs

According to Deacon and Firebaugh, outputs of the family system are demand responses and resource changes. Demand responses are defined as the outcome from managerial actions relating to values and satisfaction (1988, p. 114). Goals that are specifically stated can provide the family and its members satisfaction from achieving a desired end.

Resource changes are defined as the outcome of
managerial actions relating to the composition of the stock of human and material means or assets (Deacon & Firebaugh, 1988, p. 117). According to Deacon and Firebaugh, a family's stock of resources can increase, decrease, or remain the same as a result of management (1988, p. 117). Family resources increase by producing, saving, and investing. Family resources decrease by consuming, transferring, and protecting. Family resources stay the same through exchanges.
CHAPTER 2. REVIEW OF LITERATURE

In this chapter, previous studies in family resource management are reviewed. Also included in this chapter are studies that use variables not usually included in family resource management studies that are of interest to the current study. These variables are family adaptability, family cohesion, and family health symptomology. Studies are reviewed in terms of the three components of the Deacon and Firebaugh (1988) theoretical model: inputs, transformations and outputs.

Inputs

Current research in family resource management has rarely explicitly studied the number and/or type of goals and events (demands) that families respond to. Rather, the few family resource management researchers that have recently examined family demands commonly use either a measure of family composition (Garrison & Winter, 1986; Heck, 1983; and Jackson, 1978), single-parent families, (Branson, 1983; and Buehler & Hogan, 1986), or select a sub-group population that share a common family occurrence, such as financial difficulties (Brown, Heltsey & Warren,
1982; and Schnittgrund & Baker, 1983) to implicitly measure family goals and events.

In contrast, research in family stress theory has examined both the number and types of family goals and events in great detail. In these studies, stressors or sources of stress are used to measure inputs or internal or external stimuli received from the environment that families act upon or respond to.

Researchers in family stress theory have utilized three concepts to measure stressors. These variables are traumatic events, life events, and daily hassles.

**Traumatic events**

Traumatic events focus on life events that shake individuals or communities to the core. By definition, traumatic events occur external to the family system. Examples of such events are floods and other natural disasters (Erikson, 1976), war (Boss, 1987; Hill, 1949), the Great Depression (Angell, 1936; Cavan & Ranck, 1938, Elder, 1974), the recent "farm crisis" (Bultena, Lasley, & Geller, 1986; Norem & Blundell, 1988; Rosenblatt & Keller, 1983; and Wilhelm & Ridley, 1988), and post-traumatic shock syndrome (Rosenthal, Sadler, & Edwards, 1987; and Zilberg, Weiss, & Horowitz, 1982).
The link between traumatic life events and manifestations of psychological symptoms (emotional health) has been noted for a long time (Zilberg et al. (1982) cite Freud and Charcot from the late 1800's to make this point). Erikson (1976) describes the Buffalo Creek Flood in West Virginia that wiped out "everything in its path" and destroyed the social, spiritual, and physical lives of individuals, families, and communities.

Zilberg et al. (1982) coined the term Post-Traumatic Stress Disorder to describe ineffective or unhealthy responses to traumatic life events. These authors found that a pattern of oscillation between intrusion (unwelcome, and powerful memories concerning the traumatic event) and avoidance (refusal to face the traumatic event) was typical in a syndromatic group.

More recently, the recent "farm crisis" has been studied as a traumatic event. In a descriptive study from personal interviews by trained family therapists of farm families at a time of economic crisis, Norem and Blundell (1988) concluded that a high level of stress pileup occurred related to (1) threats to a farm family life-style, (2) confused role relationships, (3) intergenerational issues, and (4) the community situation. In another study of farm families, Bultena et al. (1986),
found financial hardship associated with perceived changes in quality of life, personal and familial stress, and family-life patterns.

Life events

Life events are defined as those positive or negative experiences in life that are of such consequence that they produce or have the potential to produce change within the family social system (Lavee, McCubbin, & Olson, 1987; McCubbin & Dahl, 1985). Although some of these events may be traumatic to the individuals and families involved, they are discrete and more moderate in nature than traumatic events. The distinction between traumatic events and life events is somewhat arbitrary and not clarified in the family stress literature.

Life events occur both internally and externally to the family system. A change in family structure, such as death or birth of a family member, or marital instability (separation, divorce) are example of family life events that originate inside the family system. Job loss or promotion are examples of events that originate outside the family system.

A plethora of studies have used life events either as a single indicator or in conjunction with other stressor
variables (input) to predict stress outcome (output). Most of these studies examine the stressor-to-stress outcome relationship. That is, transformations are not included in these studies.

According to Thoits (1983), who evaluated and synthesized 20 research studies related to life events and psychological distress (emotional health symptomology), past studies have addressed the question of what type of events influences disturbance and how life events actually affect people, directly or indirectly. Thoits (1983) concluded that psychological disturbance is more highly correlated with total undesirable change than with the total amount of change.

The following studies use life events as a single indicator of stressors to predict health symptomology: Bigbee (1987), Billings and Moos (1982), Lavee et al. (1985), Miller and Ingham (1985), and Rabkin and Struening, (1976).

Zarski (1984) also uses multiple indicators to measure stressors, but he uses the variable life experiences rather than life events. It is not clear in his article if the life experience variable is the same as a life event variable. Although the article identifies the inventory used (Life Experiences Survey), the number of items, and the ratings of the scale items, it does not describe the particular items in the scale, nor is the Life Experiences Survey instrument included in the article as an appendix. Zarski concludes that life experiences scores are better predictors of physical symptoms and energy level.

**Daily hassles**

Daily hassles are defined as the day-to-day interpersonal relationships or aspects of routines that have an impact on individual or family life (Malia, Ohuche, Norem, Allen & Bivens, 1987). Annoying practical problems, disappointments, disagreements, financial and family concerns are examples of specific daily hassles. According to Kanner et al. (1981) hassles may be situationally determined (traffic jams, untimely phone calls, broken shoelaces), and either rare or repetitive. Repetitive hassles occur either because an individual or family remains in the same context (work or marriage) or is
ineffective in managing or coping with common daily occurrences (dealing with authority or members of the opposite gender).

Daily hassles is becoming a prevalent indicator of stressors. Recently, studies have utilized this concept to measure stressors either alone or in conjunction with life events. As discussed previously, several studies have used multiple indicators of stressors to predict stress outcome. Other studies use daily hassles as a single indicator of stressors. These studies include DeLongis, Folkman, and Lazarus (1988), and Reich, Parrella, and Filstead (1988).

Several of the studies that use multiple indicators of stressors found that daily hassles are a better predictor of stress manifestation than life events (DeLongis et al., 1982; DeLongis et al., 1988; Kanner et al., 1981; Monroe, 1983; and Zarski, 1984). In a study comparing daily hassles/uplifts and life events, Kanner et al. (1981) found that their 117-item daily hassles scale (administered once a month for nine consecutive months) was a better predictor of concurrent and subsequent psychological symptoms than were life events scores. In a study of adolescence stress, Rowlinson & Felner (1988) conclude that daily hassles are a better indicator of stressors because they are a more proximal measure of stressors (life events are a more
distal measure of stressors).

Kanner et al. (1981) recommend that research on daily hassles examine the nature of daily hassles. Dimensions of daily hassles identified by these authors are timing, frequency, intensity, duration, and repetition. In most of the studies that use daily hassles as an indicator of stressors, daily hassles are used as a single index variable.

A recent exception to this common practice is Reich et al. (1988). In this study of substance abuse patients, Reich et al. (1988) divide the daily hassles inventory developed by Kanner et al. (1981) into two dimensions: hassle number and hassle intensity. The authors indicate that hassle number is an objective measure of daily hassles and hassle intensity is a subjective measure of daily hassles. These authors (Reich et al., 1988) found that hassle number and hassle intensity measure different aspects of daily hassles and affect stress outcome differently.

A limitation of this study cited by the authors (Reich et al., 1988) is that the hassles scale utilized in this study does not include a response category for hassles that occurred, but are not perceived as disturbing or stressful by the family. These authors recommend that an "occurred,
but no bother" category be added to a daily hassle inventory to determine if hassles can occur and not involve an emotional response. This addition would improve the measurement of the subjective aspects of stressors. These authors also recommend that the daily hassles inventory be modified to include a frequency of occurrence dimension so that a better measure objective stressors is developed.

A current topic of debate in family stress research is the confounding of daily hassles and health (DeLongis et al., 1988; Dohrenwend, Dohrenwend, Dodson & Shrout, 1984; Dohrenwend & Shrout, 1985; Lazarus, DeLongis, Folkman & Gruen, 1985; Reich et al., 1988; and Rowlinson & Felner, 1988). Dohrenwend et al. (1984) and Dohrenwend and Shrout (1985) argue that the relationship between daily hassles and health is confounded because items in the Hassles Scale (Kanner et al., 1981) can also be symptoms of health disorder. DeLongis et al. (1988), Lazarus et al. (1985), Reich et al. (1988) and Rowlinson and Felner (1988) argue that, although conceptual overlap occurs between daily hassles and health, the confounding is not sufficient enough to account for the relationship between daily hassles and health.

Rowlinson and Felner (1988) tested for confounded measures and found that non-symptomatic daily hassles were
as predictive of adjustment as symptomatic daily hassles. Reich et al. (1988) conclude that daily hassles are correlated with, but not confounded by health symptoms. This debate points out the need to examine the dimensions of daily hassles, in order to further understand the stressor (input) and stress outcome (output) relationship.

Only one of the studies (DeLongis et al., 1988) involved in the debate concerning confounding variables uses measures of transformations to assess the mediating ability of managerial behavior or coping efforts. This study found that participants with ineffective coping efforts as measured by unsupportive social relationships and low self-esteem were more likely to experience psychological and somatic problems than participants with effective coping efforts (i.e., supportive social relationships and high self-esteem). The results of this study indicate that more comprehensive models (models with inputs, transformations, and outputs) with multiple indicators are needed to further untangle the stress process.

The reviewed studies examine the input-to-output causal relationship. Whatever the variable or variables used to measure stressors, empirical support is found for the negative relationship between input(s) and output(s).
That is, the higher the level or degree of perceived stressors, the worse the individual or family's health (more symptoms). Or, the lower the level or degree of perceived stressors, the better the individual or family's health (fewer symptoms).

Transformations

The Managerial subsystem

Few current (less than ten years old) published studies of family managerial behavior exist. Many of the empirical family resource management studies are either unpublished theses or dissertations or local publications (State Cooperative Extension or University Research Center Bulletins). In the most recent review article on family management research from 1909 to 1984, Berger (1984) cited 85 references. Of these references, only eight were published journal articles dated between 1980 and 1984.

Research in family resource management has used variety of related indicators of measure transformations: reported managerial behavior (Berry & Williams, 1987; Garrison & Winter, 1986; and Newton, 1979), patterns of managing household tasks (Barclay, 1970; Hunt, Matthews, & Crosby, 1980; Maloch & Deacon, 1970; and Mumaw & Nichols,
time spent on various household tasks (Goebel & Hennon, 1983; Heck, 1983; Stafford, 1983; and Walker & Woods, 1976), managerial orientation (Huguley, 1976), and planning behavior (Beard & Firebaugh, 1978; Heck, 1983; and Rubio, 1987). Studies on family financial management have often used planning behaviors centering around financial matters and money management practices to measure transformations (Dollar, 1982; Hira & Mueller, 1987; Mugenda, 1988; Romino, 1970; Sahlberg, 1977; and Titus et al., 1989).

In family resource management studies, the transformation-to-output relationship has also not been investigated very often. To date, the theoretical proposition that planning and implementing affect family outcomes and mediate the effect of family goals and events on family outcomes has not been rigorously tested.

In a fairly recently published study of managing household work, Heck (1983) examined the effect of transformations on output. She found that planners (individuals who plan) are more satisfied with their family’s level of household work than non-planners. Heck concluded that planning is an integral and satisfaction-enhancing component of the management subsystem.
In a very recently published study of family financial management, Titus et al. (1989) investigated the effect of planning and implementing practices (transformations) related to financial activities on net worth and satisfaction (the indicators of outputs). This study found that households were more likely to have higher levels of net worth if the money manager practiced optimum planning activities and were more satisfied if the money manager exercised recommended implementing practices.

The Personal subsystem

In the family studies literature, family adaptability and cohesion have been used as indicators of transformations. Two studies, Lavee et al. (1985) and Molgaard (1985), investigated the influence of family adaptability and family cohesion on outcome. Family adaptability and family cohesion are the two primary dimensions of the Circumplex model (Olson et al., 1983a).

For both variables, Olson et al. (1983a) found that in "normal" (non-clinical) families, higher levels of adaptability and cohesion were associated with more effective family functioning. Molgaard (1985) found that family adaptability and cohesion are significantly related to family stress outcome as measured by three indicators:
self health symptomology, family health symptomology, and respondent's life satisfaction. Lavee et al. (1985) found family adaptability and cohesion positively and directly related to outcome as measured by emotional health symptomology, satisfaction with family life and family distress.

Outputs

**Family health symptomology**

To date, studies in family resource management have not included health as an indicator of any one of the three components of the model. Deacon and Firebaugh (1988) identify health as a family resource, however.

In contrast, in family stress research the negative relationship between stressors (input) and health symptomology (output) is well documented. Studies by Billings and Moos (1982), Cobb (1976), DeLongis et al. (1982), DeLongis et al. (1988), Grant, Patterson, Olshen, and Yager (1987), Husaini, Neff, Newbrough and Moore (1982), Lewinsohn and Talkington (1979), Mitchell, Cronkite and Moos (1983), Monroe (1983), Pearlin, Lieberman, Menaghan and Mullan (1981), Rabkin and Stuening (1976), Reich et al. (1988), Stone and Neale (1984), Weinberger et
al. (1985), and Zarski (1984) have all examined this relationship.

DeLongis et al. (1982), and DeLongis et al. (1988), Kanner et al. (1981), Lewisohn and Talkington (1979), all used time series analysis in their stress research. Billings and Moos (1982) and Grant et al. (1987), and Pearlin et al. (1981) all used panel data.

In her evaluation and synthesis of 20 research studies related to life events and psychological distress (emotional health symptomology), the only dependent variable Thoits (1983) discusses is emotional health or well-being. She concludes that the total amount of change is the best predictor of physical health symptoms, and that undesirable change is the best predictor of psychological health symptoms.

Several studies are unique in that they not only use a health variable for an individual, but also for an entire family (Hulbert, 1985; Lee, 1986; and Molgaard, 1985). These studies found that family health symptomology is at least as good, if not a better indicator of output, as individual symptomology.

In two of these studies (Lee, 1986; and Molgaard, 1985), the family health symptomology variable was created by adding the respondent’s report of his/her own symptoms
with the spouse's report of his/her symptoms and the respondent's report of children's symptoms. Before creating a total family score, the sum of each item (symptom) is divided by family size. The total family score, then, is created by adding the symptoms scores.

As previously discussed, few studies (Lavee et al., 1985; and Molgaard, 1985) examine the mediating influence of transformation on the relationship between inputs and outputs. In other words, the direct and indirect effects of inputs on outputs has not been closely scrutinized.
CHAPTER 3. THE MODEL OF THE CURRENT STUDY AND HYPOTHESIS

In this chapter, the empirical model of the current study is presented. At the end of this chapter, the primary hypothesis will be generated and the hypothesized causal relationships among the variables will be stated.

The Empirical Model of the Current Study

Because the unit of interest of the current study is the family, variables used as indicators of the components of the model are representative of family characteristics. Three variables (dimensions) of daily hassles are used to assess inputs. Three variables are used to measure transformations. These variables are reported managerial behavior, family adaptability, and family cohesion. Family health symptomology based on the reports of the respondent for his/her self and each family member is the variable used to represent outputs.

**Inputs: Daily hassles**

Family demands are measured by an indicator of stressors: daily hassles. In the current study, stressors are conceived as inputs because they fit the Deacon
and Firebaugh (1988) definition of demands. As explained in an earlier chapter, Deacon and Firebaugh refer to demands as the inputs that provide the stimulus, motivation, and meaning to the activity undertaken by the family (1988, p. 16). Daily hassles is considered to be an indicator of inputs in the current study because in studies of family stress daily hassles is one of three variables used to measure sources of stress or demands that families act upon or react to.

Based on the review of literature, it can be concluded that daily hassles are a better indicator of stressors than life events because daily hassles are more directly and more tangibly describe the life circumstances individuals and families confront in life. As families function, hassles occur related to life events. For example, when a baby is born into a family (a life event), there are many minor changes that parents and/or siblings respond to. New daily routines are established and responsibilities are shifted as the family responds to the addition of a new member.

Because these minor changes are more directly related to family response to demands, and that all life events have associated daily hassles, daily hassles are assumed to be a better indicator of stressors than life events. Many of these daily hassles are managed by families. This line of
reasoning is not suggesting that all daily hassles occur from life events, but rather that all life events have minor adjustments for families to make.

Another reason daily hassles was selected to represent family goals and events is that daily hassles is a newer variable in family stress research and therefore has not been subjected to as much scrutinizing as other stressor variables. Further examination of daily hassles in a comprehensive model will enable researchers to more thoroughly examine the problem of confounded concepts and variables discussed in the previous chapter.

The current study uses a recently developed daily hassles inventory (Norem, Garrison, & Malia, 1988a). As designed by its authors, this inventory examines three dimensions of daily hassles: 1) time and energy involvement, 2) positive influence, and 3) negative influence. It is hoped that this new inventory will begin to determine the specific qualities of daily hassles that influence family functioning.

In family stress studies, it is recognized that not all families act or react to all of the items in any inventory that measures stressors or family goals and events. The actuality of a goal or event is not as critical to family functioning as is the family's perception of the goal or
event. Thus, families who do not experience a particular goal or event act the same as families who experience a particular goal or event, but do not perceive the particular goal or event as affecting the family and its functioning.

Transformations

Transformations are measured by three variables. These variables are reported managerial behavior, family adaptability, and family cohesion.

Reported managerial behavior As shown in the review of literature, an assessment of reported managerial behavior whether identified as managerial behavior, planning behavior or patterns of household tasks, is a key indicator of transformations in family resource management studies.

The items included in the reported managerial behavior index of the present study tap activities and thought processes that are representative of managerial behavior. The items in the index measure transformations because they involve action or practices, rather than knowledge or attitudes (indicators of inputs).

Family adaptability and family cohesion These two variables, adaptability and cohesion have been found to be useful indicators of transformations in family stress studies as indicated in the review of literature. These two
variables have also been identified by Deacon and Firebaugh as key indicators in the process of family management.

Family adaptability and family cohesion use represent transformations in the current study because they measure family dynamics rather than individual or family personality characteristics. Family adaptability and family cohesion are also important variables to the current study because they measure attributes of family functioning, and not the behavior of individual family members.

**Outputs: Family health symptomology**

In family stress theory the most widely used indicator of outcome is physical, and/or emotional health symptomology. The negative relationship between stressors and health as outcome is well documented in both individual and family stress research. In current research, the health variables used measure physical and psychological symptoms, not current health status (e.g., an index of healthiness).

In the current study, an indicator of health symptomology is used to represent outputs. Family health symptomology is not used as an indicator of inputs (resource availability) or transformations (resource allocation) because the inventory in the data of the current study measures physical and emotional symptoms, not health as a
resource (an input) or healthy practices (a transformation).

The Hypotheses

Based on the Deacon and Firebaugh (1988) theoretical model and past studies, the causal relationships of the current study are hypothesized. These theoretical propositions will be proffered in terms of the components of the conceptual model of the present study. The empirical model of the current study is depicted in Figure 2.

Inputs-to-transformations

In the current study, it is hypothesized that families with more stressors that are negatively perceived by the money manager will not manage and function as effectively. In other words, the greater the time and energy involvement of daily hassles and the more negative the influence of daily hassles, the lower the reported managerial behavior, family adaptability and family cohesion. The more positive the influence of daily hassles, the higher the reported managerial behavior, family adaptability and family cohesion.
Figure 2. The model of the current study

\[ \begin{align*}
\varepsilon_1 & : \text{Time and energy involvement of daily hassles} \\
\varepsilon_2 & : \text{Positive influence of daily hassles} \\
\varepsilon_3 & : \text{Negative influence of daily hassles} \\
\eta_1 & : \text{Reported managerial behavior} \\
\eta_2 & : \text{Family adaptability} \\
\eta_3 & : \text{Family cohesion} \\
\eta_4 & : \text{Family health symptomology}
\end{align*} \]
The specific hypotheses related to inputs and transformations are the following:

1. The time and energy involvement of daily hassles is negatively related to reported managerial behavior.
2. The positive influence of daily hassles is positively related to reported managerial behavior.
3. The negative influence of daily hassles is negatively related to reported managerial behavior.
4. The time and energy involvement of daily hassles is negatively related to family adaptability.
5. The positive influence of daily hassles is positively related to family adaptability.
6. The negative influence of daily hassles is negatively related to family adaptability.
7. The time and energy involvement of daily hassles is negatively related to family cohesion.
8. The positive influence of daily hassles is positively related to family cohesion.
9. The negative influence of daily hassles is negatively related to family cohesion.

**Inputs-to-outputs**

It is hypothesized in the current study, that families with more stressors that are negatively perceived by the
money manager of the family will exhibit more symptoms or worse health. In other words, the greater the time and energy involvement of daily hassles and the more negative the influence of daily hassles, the more symptomology reported by the money manager. The more positive the influence of daily hassles, the better the health (fewer symptoms) of the family members as reported by the money manager.

The specific hypotheses related to inputs and outputs are the following:

(1) The time and energy involvement of daily hassles is positively related to family health symptomology.

(2) The positive influence of daily hassles is negatively related to family health symptomology.

(3) The negative influence of daily hassles is positively related to family health symptomology.

Transformations-to-outputs

It is anticipated in the present study that there will be a negative relationship between transformations and outputs. That is, the higher the reported managerial behavior score, the better the family's health (fewer symptoms). The greater the family's adaptability, the better the family's health (fewer symptoms). And, the
greater the family's cohesion, the better the family's health (fewer symptoms).

The specific hypotheses related to transformations and outputs are the following:

(1) Reported managerial behavior is negatively related to family health symptomology.

(2) Family adaptability is negatively related to family health symptomology.

(3) Family cohesion is negatively related to family health symptomology.

 Inputs-to-transformations-to-outputs

The primary hypothesis of the current study is that the influence of daily hassles on family health symptomology is mediated by the three measures of transformations (reported managerial behavior, family adaptability, and family cohesion). Specifically, when reported managerial behavior, family adaptability, and family cohesion are included in the model of the current study the following changes are hypothesized:

(1) the relationship between the time and energy involvement of daily hassles and family health symptomology will be weaker than the direct relationship between the time and energy involvement of daily hassles and family health
symptomology.

(2) the relationship between the positive influence of daily hassles and family health symptomology will be stronger than the direct relationship between the positive influence of daily hassles and family health symptomology.

(3) the relationship between the negative influence of daily hassles and family health symptomology will be weaker than the direct relationship between the negative influence of daily hassles and family health symptomology.
CHAPTER 4.  PROCEDURES

This chapter includes a discussion of the data used in the current study. The variables are operationalized and the statistical analyses that will be performed to test the hypothesis are described.

The Data

Data for this study were collected as part of the regional project, NC-182, "Family Resource Utilization as a Factor in Determining Economic Well-Being of Rural Families". Iowa is one of eight states participating in this project funded through the experiment stations at the eight state universities.

Each state selected two counties to be in the sample. The sampling procedures established by the project participants were the following:

(1) rural counties in which 20 percent or more of employed persons were involved in one of the following occupations: agriculture, livestock, forestry, mining and or fishing were identified;

(2) these counties were ranked by change in per capita
income (ranging from greatest change to smallest change) from 1979-1985;

(3) counties were placed into quartiles;

(4) one county from the bottom quartile and one county from the top quartile were randomly selected.
The county from the bottom quartile has a smaller change in per capita income. The county from the top quartile has a greater change in per capita income. The counties in Iowa selected are Van Buren and Pocohantas.

The sample was identified through the use of a commercial mailing list obtained from a large direct marketing corporation. Each state was sent name and address labels for the counties selected.

During the spring of 1988, the data were collected through mail surveys. Respondents were the self-designated money manager and the other adult in the household, if available. Potential participants were sent a informational card followed by the questionnaires. Additional questionnaires were sent to those people who did not return to the first questionnaires. Surveys were mailed to 900 residents of the two counties selected from each state.

In Iowa, the first mailing resulted in 193 returned surveys from the money managers and 114 completed
questionnaires from the other adult. The second mailing resulted in an additional 108 returned surveys from the money managers and another 66 from the other adults. Total usable questionnaires from Iowa are 291 from the money managers and 154 from the other adult in the household. Incomplete questionnaires were removed. The response rate for Iowa was 33 percent.

Description of the sample

The present study uses the data collected from the Iowa families. In the current study, the sample is reduced to 185 cases because questionnaires were eliminated if the respondents were not from an intact couple and if the daily hassles inventory was not completed. The present study utilized responses from the money managers only because the questionnaire for the other adult in the household did not contain all the variables of interest for this study.

For this sample, almost 60 percent of the respondents were male. Over 90 percent of the respondents report their racial or ethnic background as white.

The ages of the respondents range from 24 to 81 years with the mean value being 48 years. Twenty-five percent of the respondents were between the ages of 24 and 34. Another 25 percent of the respondents were between the ages
of 35 and 44. Another one-quarter of the respondents were between the ages of 45 and 62. The remaining 25 percent of the respondents were between the ages of 63 and 81. Compared to the national average (11 percent in 1980), the elderly (63 years and older) are over-represented in this sample.

In the current sample, years of education ranged from eight to 19. Approximately, 50 percent of the respondents completed high school. An additional 41 percent of the respondents had at least some post-high school education, including baccalaureate degrees.

Annual family income in the present sample ranged from less than $5,000 to $100,000 and over. More than 75 percent of the present sample, however, reported family income from 1987 as less than $35,000. Thirty-five percent of the sample reported annual family earnings of less than $20,000. Forty-one percent of the sample reported annual family earnings between $20,000 and $35,000. The remaining 24 percent of the sample reported annual family earnings of more than $35,000.

Almost 70 percent of the respondents in the current sample report being employed outside the home or self-employed. One-fifth of the respondents are retired. Almost 10 percent of the respondents are full-time
In the sample of the current study, family size ranges from 2 to 7 people. Over 40 percent of the current sample are adult couples without children living at home. A little more than 10 percent have either one child (13.5%) or three children (11.4%) living at home. Almost 30 percent (28.6) of the households in the current sample have two children living at home.

The Variables

This section describes the items used to develop the variables of the current study. In the next chapter, univariate statistics will be discussed.

**Inputs: Daily hassles**

The inventory of daily hassles used in the current study examines three dimensions of daily hassles. As previously discussed, these dimensions are the 1) the time and energy involvement of daily hassles; 2) the positive influence of daily hassles; and 3) the negative influence of daily hassles.

In this inventory, respondents report their response of the three dimensions of daily hassles (the time and
energy involvement, the positive influence, and the negative influence) on twenty items related to daily life. In the questionnaire, respondents were given the following directions to complete the daily hassles inventory:

On the following page is a list of relationships and aspects of day-to-day living common to most people. Sometimes these are positive; sometimes they are negative; or a combination of both. Please think about each of these items in terms of your own life:

In Column A, indicate how much time and energy are involved for you.

In Column B, indicate how much positive influence it has on your day-to-day life

In Column C, indicate how much negative influence it has on your day-to-day life

The 20 items in the inventory are the following:

- child care, pet care, living space, inside home maintenance, outside home maintenance, vehicle care, transportation, family financial matters, work responsibilities, work environment, use of leisure time, community involvement, relationship with spouse, relationship with children, relationship with parents, relationship with in-laws, relationship with siblings, relationship with friends, relationship with neighbors, relationship with at work. Potential responses for each dimension were: (1) none, (2) slight, (3) moderate, (4) a lot, and (5) a great deal.
As designed by the authors and based upon previous analyses of a earlier version of the daily hassles inventory (Lee, 1986), the three daily hassle dimensions are separated into three distinct variables. For each variable, the responses of the 20 items are weighted by the respondent's perception (i.e., none, slight, moderate, a lot, and a great deal).

The potential range for each dimension of the daily hassles instrument varies depending upon whether the respondent has children, pets, employment, or other living relatives (parents, in-laws, and siblings). Assuming an individual responded to all 20 items, for each variable the range would be from 20 to 100.

Based on the premise that families who do not experience a particular daily hassle act the same as families who experience the stressor, but do not perceive the daily hassle as affecting the family and its functioning, respondents who reported "not applicable" are treated the same as families who reported "none". In other words, "not applicable" responses are assigned the value for the response "none" which is (1).
Transformations

Transformations are measured by three variables. These variables are reported managerial behavior, family adaptability, and family cohesion.

Reported managerial behavior The index used to represent reported managerial behavior in the current study has items that involve both planning and implementing activities. The specific items in this index are the following:

1. Make plans on how to use money.
2. Write down where money is spent.
3. Use a written budget.
4. Evaluate spending on a regular basis.
5. Evaluate your needs before you buy.
6. Keep bills and receipts where they are easy to find.
7. Make a list before you shop.
8. Combine shopping with job or errands.
9. Make plans on how to use time.
10. Do things when they need to be done.

Respondents were asked to report the frequency of the 10 activities. Potential responses were (1) never, (2) seldom, (3) occasionally, (4) usually, and (5) most of the time. As calculated in other studies (Berry & Williams,
1987; Garrison & Winter, 1986; and Newton, 1979), a single index representing reported managerial behavior will be developed by summing the score of each item. The potential range of this variable is from 10 to 50.

Family adaptability and family cohesion

The current study used FACES III (Olson, Barnes, Larsen, Muxen & Wilson, 1985). As designed by its authors, this single inventory asks respondents to describe the relationship with their spouse or partner on 20 items.

Each variable has 10 items. The items used to create family adaptability are the following:

1. When problems arise, we compromise.
2. We are flexible in how we handle our differences.
3. Different persons act as leaders in our marriage.
4. We change our way of handling tasks.
5. We try new ways of dealing with problems.
6. We jointly make the decisions in our marriage.
7. Rules change in our marriage.
8. We shift household responsibilities from person to person.
9. It is hard to identify who the leader is in our marriage.
10. It is hard to tell who does which household chores.
The items used to create family cohesion are the following:

1. We ask each other for help.
2. We approve of each other's friends.
3. We like to do things with each other.
4. We feel closer to each other than to people outside our family.
5. We like to spend free time with each other.
6. We feel very close to each other.
7. We share hobbies and interests together.
8. We can easily think of things to do together as a couple.
9. We consult each other on our decisions.
10. Togetherness is a top priority.

For both variables, potential responses were (1) almost never, (2) once in a while, (3) sometimes, (4) frequently, and (5) almost always. As designed by the authors, each variable is created by summing the 10 items (Olson et al., 1985). The potential range of these variables is from 10 to 50.

As developed by Olson et al. (1985), the four levels of family adaptability (rigid, structured, flexible, and chaotic) are calculated by partitioning the family's adaptability score. Rigid families have scores between 10
and 19. Structured families have scores between 20 and 24. Flexible families have scores between 25 and 28. Chaotic families have scores between 29 and 50.

The four levels of family cohesion (disengaged, separated, connected, and enmeshed) are created in the same way. Disengaged families have scores between 10 and 34. Separated families have scores between 35 and 40. Connected families have scores between 41 and 45. Enmeshed families have scores between 46 and 50 (Olson et al., 1985).

**Outputs: Family health symptomology**

In the current study outputs are measured by family health symptomology. The current study uses a family health inventory developed by Norem, Malia and Garrison (1988b).

In this inventory, respondents are asked to report the frequency of 16 health-related items for each family member living at home, including themselves. Both emotional and physical symptoms are included in the inventory. The items in this inventory are the following: headaches, sore throat, tension, feeling down, feeling pressured, upset stomach, trouble getting to sleep, trouble staying asleep, loneliness, restlessness, shortness of
breath, low energy or motivation, difficulty relaxing, backaches, nervousness, and exhaustion. Potential responses were (1) never, (2) seldom, (3) sometimes, (4) a lot, and (5) almost always.

As designed by the authors and based upon the results of earlier versions of this inventory (Hulbert, 1985; Lee, 1986; and Molgaard, 1985), the family symptomology variable is calculated by adding the respondent's report of his/her own symptoms with the respondent’s report of his/her spouse’s symptoms and the respondent’s report of the children’s symptoms. The ensuing result for each of the 16 symptoms is divided by family size. The total family score is then created by adding the 16 symptoms scores. The potential range of this variable is from 16 to 80 because the individual symptom scores are divided by family size in order to control for the number of family members.

Data Analysis

Two statistical packages, SPSSX and LISREL VI (Linear Structural Relationships) are utilized to analyze the data. SPSSX is used to obtain frequency distributions, reliability (internal consistency) and factor analyses, and Pearson product-moment correlations on all variables. The
LISREL VI program was selected to test the empirical model of the current study.

Rationale for using structural equation modeling

LISREL is used to test the empirical model of the current study. LISREL is selected as the statistical program to test the model because of its capacity to simultaneously analyze endogenous variables in a model. It allows for the correlation (not causation) of endogenous variables through the error terms.

In other words, the LISREL program allows the relationships between the three indicators of transformations (reported managerial behavior, family adaptability, and family cohesion) that are endogenous variables to be non-causally ordered. In the model that the current study is testing (Figure 2, p. 37), the relationships between reported managerial behavior and family adaptability, reported managerial behavior and family cohesion, and family adaptability and family cohesion, are presented as correlational or associational, rather than causal. In Figure 2, the correlational relationships among the three indicators of transformations are represented by curved lines without arrows that connect the error terms of these variables.
The traditional path analytic approach (standardized ordinary least squared regression) does not allow for the simultaneous analysis of multiple variables of the same endogenous theoretical construct (i.e., transformations). If the traditional path analytic approach would have been selected to test the empirical model of the current study, three separate regression analyses would be required. Only a single variable representing transformations would have been included in each of the regression analyses.

With the traditional path analytic approach, the interpretation and evaluation of the parameters of the model involving the three indicators of transformations would occur after the statistical analyses were conducted rather than as a part of the statistical analyses. In addition, the relationships between reported managerial behavior, family adaptability, and family cohesion would be nonexistent and not incorporated into the actual statistical analysis.

Description of the LISREL program

The LISREL statistical package has the capacity to analyze structural equation models. Structural equation models may include a structural model that is different than the measurement (confirmatory factor) model or the
structural model may be identical to the measurement model as in the case of the empirical model of the current study.

When using LISREL with distinct structural and measurement models, the research is able to determine whether or not a particular model fits the data as well as which model fits the data best (Lavee, 1988). When using LISREL with identical structural and measurement models, however, the fit of the model to the data is not considered essential to the testing of the hypothesis. Rather, the relative strength and importance of the individual parameters in the model are emphasized (Joreskog & Sorbom, 1984; and Pedhazer, 1982).

In either instance, the estimation of the model is based on maximum likelihood statistical theory. Summary statistics associated with LISREL include Chi-square, Goodness-of-Fit index (GFI), Adjusted Goodness-of-Fit Index (AGFI), and Root Mean Square Residual (RMSR). The amount of variance explained (R square) in each endogenous variable is also furnished by the LISREL program. In the LISREL program, the amount of variance explained is referred to as the Coefficient of Determination (Lavee, 1988).

LISREL also provides parameter (path) estimates similar to standardized regression coefficients. Unlike
the traditional path analytic approach, LISREL has specific symbols (Greek letters) for the parameters of a model. The symbols for the indicators and parameters of the empirical model for the current study are the following: One, the Greek letter ksi is used to represent an exogenous variable. Two, the Greek letter eta is used to represent an endogenous variable. Three, the Greek letter representing gamma is used to identify exogenous-to-endogenous causal relationships. Four, the Greek letter representing beta is used to identify the endogenous-to-endogenous causal relationships. Five, the Greek letter representing phi is used to identify a non-causal relationship between exogenous variables. Six, the Greek letter representing zeta is used to identify the error term of an endogenous variable. Seven, the Greek letter representing psi is used to identify the variance of an endogenous residual (zeta) and the covariance between endogenous error terms.

The LISREL program generates the direct effects (maximum likelihood estimates) and the total effects. The total effect is determined by the sum of the direct and indirect effects. Once the total effects and direct effects are furnished, the indirect effects can be calculated. The aggregate indirect effects are calculated
by subtracting the direct effects from the total effects. The individual indirect effects are calculated by multiplying the path estimates of the specific parameters involved in the indirect effects. After decomposing the effects of a model, the importance of the direct effects relative to the indirect effects can be assessed (Alwin & Hauser, 1975; Fox, 1980; Fox, 1985; and Sobel, 1987).

In the results of current study, the decomposition of effects will be presented in order to evaluate the mediating ability of transformations. The direct effects of inputs (daily hassles) on outputs (family health symptomology) will be compared to the indirect effects of inputs (the exogenous variables) on outputs via the three indicators of transformations (reported managerial ability, family adaptability, and family cohesion).

In the model of the current study, the three indicators of daily hassles are exogenous variables. The three measures of transformations (reported managerial behavior, family adaptability, and family cohesion) and family health symptomology (the indicator of outputs) are endogenous variables. When using the LISREL statistical package, the researcher does not utilize the raw data. Rather, an input matrix is used. The input data for this study are a correlation matrix (Table 7, p. 75).
CHAPTER 5. UNIVARIATE STATISTICS AND CORRELATIONS

This chapter presents univariate statistics for all variables. The chapter concludes with a description of the results of the Pearson Product-moment correlations.

Univariate Statistics

This section explains the descriptive statistics for all variables in the current study. For multi-item variables, the results of reliability analyses (internal consistency) and factor analyses are discussed. The descriptive statistics for all variables are depicted in Table 1.

Inputs: Daily hassles

Time and energy involvement

The reliability (Cronbach's alpha) for the time and energy involvement of daily hassles is .83. Although the reliability coefficient is quite high (closer to one than zero), the factor loadings for this variable range from .22 to .62. The highest loading is for the item representing relationship with parents. The lowest loading is for the item relating
Table 1. Descriptive statistics for all variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hassles-time &amp; energy</td>
<td>0.00</td>
<td>-0.11</td>
<td>1.00</td>
</tr>
<tr>
<td>Hassles-positive influence</td>
<td>0.00</td>
<td>-0.17</td>
<td>1.00</td>
</tr>
<tr>
<td>Hassles-negative influence</td>
<td>0.00</td>
<td>-0.25</td>
<td>1.00</td>
</tr>
<tr>
<td>Reported managerial behavior</td>
<td>38.37</td>
<td>39.00</td>
<td>5.61</td>
</tr>
<tr>
<td>Family adaptability</td>
<td>32.34</td>
<td>32.00</td>
<td>6.10</td>
</tr>
<tr>
<td>Family cohesion</td>
<td>41.47</td>
<td>42.00</td>
<td>6.45</td>
</tr>
<tr>
<td>Family health symptomology</td>
<td>36.08</td>
<td>36.50</td>
<td>8.05</td>
</tr>
</tbody>
</table>
to community involvement. The results of the factor analysis indicate that these items are best represented by a single factor (eigenvalue=4.95). The next highest eigenvalue is 1.93.

In order to take into account the factor loadings, this variable was recreated by calculating a factor score for each item in the inventory. Only items with a factor loading greater than 0.4 are included in the index. Because of low factor loadings, three items in the inventory were removed from the index. These items are pet care, living space, and community involvement.

Factors scores are created by multiplying the factor loading of each item by the standardized value of that item for each case. The mean value of a variable created by factor scores is zero and the standard deviation is one.

The range of values for the recreated time and energy involvement daily hassle variable is from -0.61 to 2.84. The median value is -0.11. The reliability coefficient (Cronbach’s alpha) of the remaining 17 items in the index is the same as the reliability coefficient for the original 20 item index (.83).

The results of the factor analysis for all items in the daily hassle variables are depicted in Table 2. This variable was created so that the higher the score, the more
Table 2. Factor analysis of the daily hassles variables

<table>
<thead>
<tr>
<th>Item</th>
<th>Time &amp; Energy Involvement</th>
<th>Positive Influence</th>
<th>Negative Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child care</td>
<td>.44</td>
<td>.48</td>
<td>--</td>
</tr>
<tr>
<td>Pet care</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Living space</td>
<td>--</td>
<td>--</td>
<td>.66</td>
</tr>
<tr>
<td>Inside home maintenance</td>
<td>.42</td>
<td>.51</td>
<td>.77</td>
</tr>
<tr>
<td>Outside home maintenance</td>
<td>.44</td>
<td>.64</td>
<td>.74</td>
</tr>
<tr>
<td>Vehicle care</td>
<td>.41</td>
<td>.59</td>
<td>.67</td>
</tr>
<tr>
<td>Transportation</td>
<td>.49</td>
<td>.55</td>
<td>.53</td>
</tr>
<tr>
<td>Family financial matters</td>
<td>.56</td>
<td>.52</td>
<td>.72</td>
</tr>
<tr>
<td>Work responsibilities</td>
<td>.52</td>
<td>.53</td>
<td>.66</td>
</tr>
<tr>
<td>Work environment</td>
<td>.60</td>
<td>.57</td>
<td>.58</td>
</tr>
<tr>
<td>Use of leisure time</td>
<td>.42</td>
<td>.48</td>
<td>.63</td>
</tr>
<tr>
<td>Community involvement</td>
<td>--</td>
<td>.44</td>
<td>.48</td>
</tr>
<tr>
<td>Relationship with spouse</td>
<td>.42</td>
<td>.48</td>
<td>.74</td>
</tr>
<tr>
<td>Relationship with children</td>
<td>.57</td>
<td>.53</td>
<td>.61</td>
</tr>
<tr>
<td>Relationship with parents</td>
<td>.62</td>
<td>.54</td>
<td>.65</td>
</tr>
<tr>
<td>Relationship with in-laws</td>
<td>.59</td>
<td>.61</td>
<td>.60</td>
</tr>
<tr>
<td>Relationship with siblings</td>
<td>.61</td>
<td>.57</td>
<td>.65</td>
</tr>
<tr>
<td>Relationship with friends</td>
<td>.60</td>
<td>.66</td>
<td>.68</td>
</tr>
<tr>
<td>Relationship with neighbors</td>
<td>.58</td>
<td>.66</td>
<td>.65</td>
</tr>
<tr>
<td>Relationship with at work</td>
<td>.53</td>
<td>.49</td>
<td>.57</td>
</tr>
</tbody>
</table>
involvement daily hassles entail.

**Positive influence**  
The reliability (Cronbach’s alpha) for the positive influence of daily hassles is .86. Although the reliability coefficient is high, the factor loadings for this variable range from .22 to .66. The highest loading is for two items: (1) the item representing relationship with friends and (2) the item representing relationship with neighbors. The lowest loading is for the item pertaining to pet care. The results of the factor analysis indicate that these items are best represented by a single factor (eigenvalue=5.65). The next highest eigenvalue is 2.18.

Again, in order to take into account the factor loadings, this variable was recreated by calculating a factor score for each item in the inventory. Because of low factor loadings, two items in the inventory were removed from the index. These items are pet care and living space.

The range of values for the recreated positive influence daily hassle variable is from −2.00 to 2.70. The median value is −0.17. The reliability coefficient (Cronbach’s alpha) of the remaining 18 items in the index is the same as the reliability coefficient for the original 20 item index (.86).
The results of the factor analysis for all items in the daily hassle variables are depicted in Table 2. The coding of this variable is such that the higher the numeric value, the more positive the influence of the daily hassle items.

**Negative influence**

The reliability (Cronbach’s alpha) for the negative influence aspect of the inventory is .91. Although the reliability coefficient is very high, the factor loadings for this variable range from .33 to .77. The highest loading is for the item referring to inside home maintenance. The lowest loading is for the item concerning to pet care. The results of the factor analysis indicate that these items are best represented by a single factor (eigenvalue=7.83). The next highest eigenvalue is 1.76.

This variable was also recreated by calculating factor scores. Because of low factor loadings, two items in the inventory were removed from the index. These items are child care and pet care.

The range of values for the recreated negative influence daily hassle variable is from -2.50 to 4.25. The median value is -0.25. The reliability coefficient (Cronbach’s alpha) of the remaining 18 items (.92) in the index is almost identical to the reliability coefficient of
the original 20 item index (.91).

The results of the factor analysis for all items in the daily hassle variables are depicted in Table 2. The coding of this variable indicates that the higher the score, the more negative the effect of the daily hassles.

Transformations

**Reported managerial behavior**

The reliability coefficient (Cronbach’s alpha) for the index is .75. This relatively high reliability coefficient indicates that the items in this index are internally consistent.

The factor loadings for this variable range from .41 to .69. The highest loading is for item number two: write down where money is spent. The lowest loading is for item number eight: combine shopping with job or errands. Four of the 10 items in this index load at the .60 level or above indicating that the items load together well. The results of the factor analysis for the items in this variable are depicted in Table 3.

The mean value is 38. The median value is 39. The standard deviation is 5.61. The actual range of values for this variable is from 21 to 49. The higher the score, the more effective the managerial behavior is thought to be.
Table 3. Factor analysis of reported managerial behavior

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Make plans on how to use money</td>
<td>.57</td>
</tr>
<tr>
<td>2. Write down where money is spent.</td>
<td>.69</td>
</tr>
<tr>
<td>3. Use a written budget.</td>
<td>.47</td>
</tr>
<tr>
<td>4. Evaluate spending on a regular basis</td>
<td>.67</td>
</tr>
<tr>
<td>5. Evaluate your needs before you buy</td>
<td>.60</td>
</tr>
<tr>
<td>6. Keep bills and receipts where they</td>
<td>.56</td>
</tr>
<tr>
<td>are easy to find</td>
<td></td>
</tr>
<tr>
<td>7. Make a list before you shop</td>
<td>.64</td>
</tr>
<tr>
<td>8. Combine shopping with job or errands.</td>
<td>.41</td>
</tr>
<tr>
<td>9. Make plans on how to use time</td>
<td>.57</td>
</tr>
<tr>
<td>10. Do things when they need to be done.</td>
<td>.44</td>
</tr>
</tbody>
</table>
Family adaptability For the sample of the current study, the reliability coefficient (Cronbach's alpha) for the index is .75. Again, this relatively high reliability coefficient indicates that the items in this index are internally consistent.

The factor loadings for this variable range from .31 to .77. The highest loading is for item number five: we try new ways of dealing with problems. The lowest loading is for item number three: different persons act as leaders in our marriage. Most of the items in this index load together fairly well (.43 or above). The results of the factor analysis for the items in this variable are depicted in Table 4.

The actual range of adaptability for this sample is from 14 to 50. The mean and median values are both 32. The mode value is 35. The standard deviation is 6.10. This variable is coded so that higher numeric values signify greater family adaptability.

The family adaptability scores were partitioned into the four levels discussed in the last chapter. The results are the following: Only one percent of the families in the sample of the current study are rigid. Six percent of the families in this sample are structured. Thirty-five percent of the families in this sample are flexible. The
Table 4. Factor analysis of family adaptability

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When problems arise, we compromise</td>
<td>.67</td>
</tr>
<tr>
<td>2. We are flexible in how we handle our differences</td>
<td>.69</td>
</tr>
<tr>
<td>3. Different persons act as leaders in our marriage</td>
<td>.31</td>
</tr>
<tr>
<td>4. We change our way of handling tasks</td>
<td>.64</td>
</tr>
<tr>
<td>5. We try new ways of dealing with problems</td>
<td>.77</td>
</tr>
<tr>
<td>6. We jointly make the decisions in our marriage</td>
<td>.58</td>
</tr>
<tr>
<td>7. Rules change in our marriage</td>
<td>.33</td>
</tr>
<tr>
<td>8. We shift household responsibilities from person to person</td>
<td>.68</td>
</tr>
<tr>
<td>9. It is hard to identify who the leader is in our marriage</td>
<td>.43</td>
</tr>
<tr>
<td>10. It is hard to tell who does which household chores</td>
<td>.56</td>
</tr>
</tbody>
</table>
remaining 74 percent of the families in this sample are chaotic.

**Family cohesion**  The reliability coefficient (Cronbach’s alpha) for the scale in this sample is .89. This high reliability coefficient indicates that the items in this index are internally consistent.

The factor loadings for this variable range from .42 to .84. The highest loading is for item number three: we like to do things with each other. The lowest loading is for item number two: we approve of each other’s friends. Only one of the items in this index loads lower than .57 indicating that the items factor together well. The results of the factor analysis for the items in this variable are depicted in Table 5.

For this sample, the actual range of cohesion is from 18 to 50. The mean value is 41. The median and mode values are both 42. The standard deviation is 6.45. Because this variable (cohesion) is coded identical to adaptability, higher numeric values signify greater family cohesion.

The family cohesion scores were partitioned into the four levels discussed in the last chapter. The results are the following: Fifteen percent of the families in the sample of the current study are disengaged. Twenty-four
Table 5. Factor analysis of family cohesion

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. We ask each other for help</td>
<td>.57</td>
</tr>
<tr>
<td>2. We approve of each other’s friends</td>
<td>.42</td>
</tr>
<tr>
<td>3. We like to do things with each other</td>
<td>.84</td>
</tr>
<tr>
<td>4. We feel closer to each other than to people outside our family</td>
<td>.58</td>
</tr>
<tr>
<td>5. We like to spend free time with each other</td>
<td>.81</td>
</tr>
<tr>
<td>6. We feel very close to each other</td>
<td>.84</td>
</tr>
<tr>
<td>7. We share hobbies and interests together</td>
<td>.73</td>
</tr>
<tr>
<td>8. We can easily think of things to do together as a couple</td>
<td>.80</td>
</tr>
<tr>
<td>9. We consult each other on our decisions</td>
<td>.69</td>
</tr>
<tr>
<td>10. Togetherness is a top priority</td>
<td>.84</td>
</tr>
</tbody>
</table>
percent of the families in this sample are separated. Thirty percent of the families in this sample are connected. Thirty-one percent of the families in this sample are enmeshed.

**Outputs: Family health symptomology**

The reliability coefficient (Cronbach's alpha) for the scale on the respondent items only is .87. This relatively high reliability coefficient indicates that the items in this index are internally consistent.

The factor loadings for the respondent items only range from .34 to .70. The highest loading is for the item representing difficulty relaxing. The lowest loading is for the item relating to a sore throat. Only two of the items in this index load lower than .40 indicating that most of the items in this index load together well. The results of the factor analysis for the items in this variable are depicted in Table 6.

The actual range of values for this variable is from 17 to 59. The mean value is 36. The median value is 37. The mode value is 34. The standard deviation is 8.05. This variable is coded so that the higher the score, the greater the frequency of the family's symptoms as perceived by the respondent.
Table 6. Factor analysis of family health symptomology (respondent results only)

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Headaches</td>
<td>.52</td>
</tr>
<tr>
<td>Sore throat</td>
<td>.34</td>
</tr>
<tr>
<td>Tension</td>
<td>.67</td>
</tr>
<tr>
<td>Feeling down</td>
<td>.69</td>
</tr>
<tr>
<td>Feeling pressured</td>
<td>.55</td>
</tr>
<tr>
<td>Upset stomach</td>
<td>.39</td>
</tr>
<tr>
<td>Trouble getting to sleep</td>
<td>.48</td>
</tr>
<tr>
<td>Trouble staying asleep</td>
<td>.55</td>
</tr>
<tr>
<td>Loneliness</td>
<td>.64</td>
</tr>
<tr>
<td>Restlessness</td>
<td>.68</td>
</tr>
<tr>
<td>Shortness of breath</td>
<td>.54</td>
</tr>
<tr>
<td>Low energy or motivation</td>
<td>.67</td>
</tr>
<tr>
<td>Difficult relaxing</td>
<td>.70</td>
</tr>
<tr>
<td>Backaches</td>
<td>.61</td>
</tr>
<tr>
<td>Nervousness</td>
<td>.74</td>
</tr>
<tr>
<td>Exhaustion</td>
<td>.63</td>
</tr>
</tbody>
</table>
Pearson Product-moment Correlations

The linear relationships among all pairs of variables are identified in the Pearson Product-moment correlation matrix (Table 7). This matrix is described in three sections. These sections include a discussion of the correlations among the following kinds of variables: (1) the exogenous variables, (2) the exogenous and endogenous variables, and (3) the endogenous variables. Significant correlations are at or below the 0.05 level.

The exogenous variables

Inputs The three daily hassle variables (time and energy involvement, positive influence, and negative influence) are not significantly related. The correlation between the time and energy involvement and the positive influence of daily hassles is fairly low (0.13). The correlation between the time and energy involvement and the negative influence of daily hassles is also relatively low (-0.19). The correlation between the positive influence daily hassles and the negative influence of daily hassles is also quite low (-0.11). These low correlations indicates that these variables are not highly related and may be measuring different aspects of daily hassles. These
### Table 7. Pearson product-moment correlations between all variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hassles-time</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&amp; energy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Hassles-positive influence</td>
<td>.13</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Hassles-negative influence</td>
<td>-.19</td>
<td>-.11</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Reported managerial behavior</td>
<td>.02</td>
<td>.22*</td>
<td>-.01</td>
<td>1.0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Family adaptability</td>
<td>.17</td>
<td>.09</td>
<td>-.13</td>
<td>.25*</td>
<td>1.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Family cohesion</td>
<td>.12</td>
<td>.06</td>
<td>-.17</td>
<td>.24*</td>
<td>.58*</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>7. Family health symptomology</td>
<td>-.04</td>
<td>.06</td>
<td>.25*</td>
<td>-.12</td>
<td>-.13</td>
<td>-.08</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*Significant at 0.05 level.*
findings lend credence to the idea proposed by Kanner et al. (1981) that the dimensions of daily hassles must be explored.

The exogenous and endogenous variables

Inputs-to-transformations Only one of the correlations between the three indicators of daily hassles and the three indicators of transformations is statistically significant. The positive influence of daily hassles is positively related to reported managerial behavior (0.22). This correlation indicates that individuals who report more positive influences of daily hassles also report higher levels of reported managerial behavior.

The time and energy involvement of daily hassles is not significantly related to reported managerial behavior (0.02), family adaptability (0.17), or family cohesion (0.12). The positive influence of daily hassles is also not significantly related to family adaptability (0.09) or family cohesion (0.06). The negative influence of daily hassles is also not significantly related to reported managerial behavior (-0.01), family adaptability (-0.13) or family cohesion (-0.17). These negative findings indicate that family flexibility and family unity are not affected
by the negative or positive aspects, or the amount of time and energy required by daily stressors. Family managerial practices are also not influenced by the time and energy requirements or the negative aspects of daily occurrences.

Inputs-to-outputs One of the three variables representing daily hassles is significantly related to the variable representing outputs, family health symptomology. The negative influence of daily hassles is positively related to family health symptomology. This correlation indicates that the more negative the influence of daily hassles, the more symptoms a family exhibits.

The correlation between the time and energy involvement of daily hassles and family health symptomology is almost nonexistent (-0.04). The correlation between the negative influence of daily hassles and family health symptomology is very low (0.06). These negative findings indicate that family health is not influenced by the time and energy requirements or the negative aspects of daily occurrences.

The endogenous variables

Transformations Reported managerial behavior is statistically significantly correlated to both of the other indicators of transformations. The correlation between
reported managerial behavior and family adaptability is positive (0.25) indicating that families that report higher levels of managerial behavior are more flexible or adaptable. The correlation between reported managerial behavior and family cohesion is also positive (0.24) indicating that families that report higher levels of managerial behavior are more unified or cohesive.

As expected, family adaptability and family cohesion are quite highly correlated to each other (0.58). Families that report high adaptability, also report high cohesiveness.

The significance of these correlations indicates the salience of the existence of these relationships in the model that the current study is testing and confirms the use of the LISREL program because of its capacity to allow correlational relationships between endogenous variables through the error terms. In the empirical model of the current study (Figure 2, p. 38), these correlational (non-causal) relationships are expressed by the three curved non-directional lines that connect the three error terms of the variables representing transformations.

Transformations-to-outputs Unexpectedly, none of the correlations between the three indicators of transformations and family health symptomology, the
variable representing outputs, are significant. In other words, the correlation between family reported managerial behavior and family health symptomology is not significant (-0.12). The correlation between family adaptability and family health symptomology is not significant (-0.13). And, the correlation between family cohesion and family health symptomology is not significant (-0.08). These negative findings indicate that family health is not affected by managerial practices, family flexibility or family unity.

The results of the correlational analysis indicate that only one of the predictor variables, the negative influence of daily hassles, is significantly related to family health symptomology. The other predictor variables (the time and energy involvement of daily hassles, the negative influence of daily hassles, reported managerial behavior, family adaptability, and family cohesion) are not significantly related to family health symptomology. The effect of the lack of significant correlations among predictor and predicted variables will be discussed in Chapter 7 (Discussion).
CHAPTER 6. RESULTS OF THE LISREL ANALYSIS

This chapter presents the results of the data analysis. First, the overall fit of the model will be described. Next, a discussion of the parameter estimates will follow. Lastly, the decomposition of effects will be presented. Significant parameter estimates have a t value greater than or equal to 2.0.

The Overall Fit of the Model

Because the model of the current study is just identified with zero degrees of freedom, a perfect fit of the model to the data was found. The chi-square is zero. The Goodness-of-Fit Index (GFI) is one, and the Root Mean Square Residual (RMSR) is zero. As previously discussed, the LISREL program is being used in the current study to evaluate the relative importance of the three indicators of daily hassles and the three measures of transformations in predicting family health symptomology.

In the overall model, 16 percent of the variance in the endogenous variables is explained. The partial R-squares for the endogenous variables (reported managerial behavior, family adaptability, family cohesion, and family
health symptomology) are quite small. Five percent of the variance in reported managerial behavior is explained by the daily hassle variables. Four percent of the variance in family adaptability is explained by the daily hassle variables. Four percent of the variance in family cohesion is explained by the daily hassle variables. Nine percent of the variance in family health symptomology is explained by the daily hassles variables and the three indicators of transformations (reported managerial behavior, family adaptability, family cohesion). These results indicate the most of the variance in the individual endogenous variables, as well as the model as a whole, is not being explained by the predictor variables.

The Examination of the Model's Parameter Estimates

The parameter estimates (path coefficients) of the LISREL analysis are depicted in Figure 3. The exogenous-to-endogenous causal relationships will be examined first, followed by an examination of the endogenous-to-endogenous causal relationships. Both statistically significant and statistically insignificant results will be discussed.
\[ \varepsilon_1: \text{Time and energy involvement of daily hassles} \]
\[ \varepsilon_2: \text{Positive influence of daily hassles} \]
\[ \varepsilon_3: \text{Negative influence of daily hassles} \]

\[ \eta_1: \text{Reported managerial behavior} \]
\[ \eta_2: \text{Family adaptability} \]
\[ \eta_3: \text{Family cohesion} \]
\[ \eta_4: \text{Family health symptomology} \]

* Significant at the .05 level.

Figure 3. Maximum-likelihood estimates \((n = 185)\)
The exogenous-to-endogenous relationships

Inputs-to-transformations Of the nine hypothesized relationships between the daily hassles variables (inputs) and the three indicators of transformations, three of the parameters are statistically significant (t value greater than 1.65). The positive influence of daily hassles is positively related to reported managerial behavior (Gamma= 0.22). The time and energy involvement of daily hassles is positively related to family adaptability (Gamma= 0.15). The negative influence of daily hassles is negatively related to family cohesion (Gamma= -0.15).

Although not statistically significant, one of the gamma parameters has an estimate of 0.1. The negative influence of daily hassles is negatively related to family adaptability (Gamma= -.10, t= 1.28).

The remaining gamma parameter estimates are not statistically significant and have path coefficients of the absolute value of less than 0.1. The relationship between the time and energy involvement of daily hassles and family cohesion has a parameter estimate of 0.09 (t= 1.14). The relationship between the positive influence of daily hassles and family adaptability has a parameter estimate of 0.06 (t= 0.82). The relationship between the positive influence of daily hassles and family cohesion has a
parameter estimate of 0.03 (t= 0.47). The relationships between the time and energy involvement of daily hassles and reported managerial behavior and the negative influence of daily hassles and reported managerial behavior both have estimates of the absolute value of 0.01 (Gamma= -0.01, t= -0.17 and Gamma= 0.01, t= 0.14, respectively).

**Inputs-to-outputs** Two of the parameter estimates for the three indicators of daily hassles significantly predict family health symptomology. The negative influence of daily hassles is also positively related to family health symptomology (Gamma= .25, t= 3.43). The positive influence of daily hassles is positively related to family health symptomology (Gamma= 0.12, t= 1.66).

The remaining hypothesized relationship, the time and energy involvement of daily hassles and family health symptomology has a very small path coefficient. The parameter estimate for the relationship between the time and energy involvement of daily hassles and family health symptomology is 0.01 (t= 0.11).

The endogenous-to-endogenous relationships

**Transformations-to-outputs** One of the path estimates between the three indicators of transformations (reported managerial behavior, family adaptability, and
family cohesion) significantly predicts family health symptomology (output). Reported managerial behavior is negatively related to family health symptomology (Beta = -0.13, t = -1.68).

Of the two remaining estimates, one is greater than 0.1. Family adaptability is negatively related to family health symptomology (Beta = -0.11, t = -1.20).

The remaining hypothesized relationship has a small path coefficient. The parameter estimate for the relationship between family cohesion and family health symptomology is 0.04 (t = 0.48).

The Decomposition of Effects

The results of the decomposition of effects are presented in Table 8 (a complete description of the parameters is included in the Appendix). In the empirical model of the current study, three of the hypothesized relationships have indirect effects. For the other parameters, the direct effects are equal to the total effects. There are not any indirect effects for these parameters.

The indirect effects that included in the model of the current study are the effect of the daily hassle variables
Table 8. Maximum-likelihood estimates and decomposition of effects (standard errors)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Direct Effect</th>
<th>Indirect Effect</th>
<th>Total Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eta1</td>
<td>Eta2</td>
<td>Eta3</td>
</tr>
<tr>
<td>$\gamma_{11}$</td>
<td>-.0124(.0745)</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{12}$</td>
<td>.2224(.0734)*</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{13}$</td>
<td>.0106(.0742)</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{21}$</td>
<td>.1474(.0747)*</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{22}$</td>
<td>.0605(.0736)</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{23}$</td>
<td>-.0954(.0744)</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{31}$</td>
<td>.0851(.0749)</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{32}$</td>
<td>.0348(.0739)</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{33}$</td>
<td>-.1467(.0747)*</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\gamma_{41}$</td>
<td>.0079(.0735)</td>
<td>.0016</td>
<td>-.0158</td>
</tr>
<tr>
<td>$\gamma_{42}$</td>
<td>.1219(.0734)*</td>
<td>-.0282</td>
<td>-.0065</td>
</tr>
<tr>
<td>$\gamma_{43}$</td>
<td>.2516(.0733)*</td>
<td>-.0013</td>
<td>.0102</td>
</tr>
<tr>
<td>$\beta_{41}$</td>
<td>-.1267(.0752)*</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\beta_{42}$</td>
<td>-.169(.0888)</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>$\beta_{43}$</td>
<td>.0426(.0883)</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

* Significant at the .05 level, 2-tail test.

Eta1: Reported managerial behavior
Eta2: Family adaptability
Eta3: Family cohesion
on family health symptomology via the three indicators of transformations (reported managerial behavior, family adaptability, and family cohesion). Nine indirect effects exist: One, the indirect effect of the time and energy involvement of daily hassles and family health symptomology via reported managerial behavior. Two, the indirect effect of the time and energy involvement of daily hassles and family health symptomology via family adaptability. Three, the indirect effect of the time and energy involvement of daily hassles and family health symptomology via family cohesion. Four, the indirect effect of the positive influence of daily hassles and family health symptomology via reported managerial behavior. Five, the indirect effect of the positive influence of daily hassles and family health symptomology via family adaptability. Six, the indirect effect of the positive influence of daily hassles and family health symptomology via family cohesion. Seven, the indirect effect of the negative influence of daily hassles and family health symptomology via reported managerial behavior. Eight, the indirect effect of the negative influence of daily hassles and family health symptomology via family adaptability. Nine, the indirect effect of the negative influence of daily hassles and family health symptomology via family cohesion.
The time and energy of daily hassles and family health symptomology

The total effect of the time and energy involvement of daily hassles on family health symptomology is -0.0027. The total indirect effect of the three indictors of transformations is -0.0106 because the direct effect is 0.0079 (0.0079 +(-0.0106) =-0.0027.).

The individual indirect effects of the three measures of transformations are the following: The indirect effect of the time and energy involvement of daily hassles and family health symptomology via reported managerial behavior is 0.0016 (-.0124 * -.1267). The indirect effect of the time and energy involvement of daily hassles and family health symptomology via family adaptability is -0.0158 (.1474 * -.1069). The indirect effect of the time and energy involvement of daily hassles and family health symptomology via family cohesion is 0.0036 (.0851 * .0426).

The reason that the total effect is so small (almost zero) is that the direct effect and the aggregate indirect effects have opposite signs and cancel each other out. The direct effect is positive and the net result of the indirect effects is negative.

In general, the combined indirect effects are about as strong as the direct effect. Of the three individual
indirect effects, the strongest indirect effect involves the family adaptability variable. The absolute value of the indirect effect of the time and energy involvement of daily hassles and family health symptomology via family adaptability is greater than the direct effect of the relationship between time and energy involvement of daily hassles and family health symptomology.

The positive influence of daily hassles and family health symptomology

The total effect of the positive of daily hassles on family health symptomology is 0.0887. The entire indirect effect of the three indicators of transformations is -0.0332 because the direct effect is 0.1219 (0.1219 + (-0.0332) = 0.0887).

The individual indirect effects of the three measures of transformations are the following: The indirect effect of the positive influence of daily hassles and family health symptomology via reported managerial behavior is -0.0282 (.2224 * -.1267). The indirect effect of the positive influence of daily hassles and family health symptomology via family adaptability is -0.0065 (.0605 * -.1069). The indirect effect of the positive influence of daily hassles and family health symptomology via family
cohesion is 0.0015 (.0348 * .0426).

These effects indicate that the direct effect of the positive influence of daily hassles on family health symptomology is much stronger than either the individual or combined indirect effects. Of the three individual indirect effects, the strongest indirect effect involves reported managerial behavior. Two of the indirect effects are negative (the effects involving reported managerial behavior and family adaptability). The indirect effect involving family cohesion is positive, although quite weak.

The negative influence of daily hassles and family health symptomology

The total effect of the negative of daily hassles on family health symptomology is 0.2543. The total indirect effect of the three indicators of transformations is 0.0027 because the direct effect is 0.2516 (0.2516 + 0.027 = 0.2538).

The individual indirect effects of the three measures of transformations are the following: The indirect effect of the negative influence of daily hassles and family health symptomology via reported managerial behavior is -0.0013 (.0106 * -.1267). The indirect effect of the negative influence of daily hassles and family health
symptomology via family adaptability is 0.0102 (-.0954 * -1.069). The indirect effect of the negative influence of daily hassles and family health symptomology via family cohesion is -0.0062 (-.1467 * .0426).

These effects indicate that the direct effect of the negative influence of daily hassles on family health symptomology is much stronger than the net indirect effects. Of the three individual indirect effects, the strongest indirect effect involves family adaptability. Two of the indirect effects are negative (the effects involving reported managerial behavior and family cohesion). The indirect effect involving family adaptability is positive.
CHAPTER 7. DISCUSSION

In general, the results of the current study do not affirm the primary hypothesis that the influence of daily hassles on family health symptomology is mediated by reported managerial behavior, family adaptability, and family cohesion. Perhaps, the most interesting findings of the current study are the negative ones.

This chapter explicates the results presented in the previous chapter. The findings supportive of the hypotheses will be discussed first, followed by a discussion of the findings that are not supportive of the hypothesis (negative findings).

Supportive Findings

Inputs-to-transformations

Of the three daily hassles variables, one of the variables does not predict transformations better than the other two variables. In fact, none of the daily hassles variables is a significant predictor of all three indicators of transformations. Each of the daily hassles variables are significantly related to one of the indicators of transformations. The time and energy
involvement of daily hassles significantly predicts family adaptability. The positive influence of daily hassles is significantly related to reported managerial behavior. The other indicator of daily hassles, the negative influence of daily hassles, is a significant predictor of family cohesion.

Of the three daily hassles variables, the best predictor of an indicator of transformation is the positive influence of daily hassles. (When using standardized coefficients, the strongest predictor is determined by the absolute value of the path estimate.) The standardized path coefficient between the positive influence of daily hassles and reported managerial behavior is 0.22. As hypothesized, the more positive the influence of daily hassles, the higher the reported managerial ability. In other words, effective managerial practices are used more often when the positive attributes of daily hassles are perceived by the self-designated manager of a family.

The next strongest predictors of transformations have standardized coefficients of the absolute value of 0.15. The standardized path coefficient between the time and energy involvement of daily hassles and family adaptability is 0.15 and the standardized path coefficient between the negative influence of daily hassles and family cohesion is
The direction of the relationship between the time and energy involvement of daily hassles and family adaptability is opposite of the hypothesized direction. A negative relationship was hypothesized to exist between the time and energy involvement of daily hassles and family adaptability. This finding indicates the more involvement required by daily hassles, the greater the adaptability of the family. That is, family flexibility is fortified by the demands of daily stressors.

As hypothesized, the more negative the influence of daily hassles, the less cohesive the family. Family closeness is adversely affected by the negative characteristics of daily hassles.

These findings lend partial support to a portion of the Deacon and Firebaugh family resource management conceptual framework. Because only three of the hypothesized nine causal relationships between inputs and transformations are significant, the theoretical proposition that inputs affect transformations is fractionally supported by the current study.

The findings of the current study also lend support to the idea that the dimensions of daily hassles are important and must continue to be explored. The three daily hassle
variables significantly predict the three indicators of transformations differently.

Reported managerial behavior is affected more by the positive influence of daily hassles than the time and energy involvement or the negative influence of daily hassles. In other words, the more positive the influence of the daily hassles, the higher the reported managerial behavior score.

Family adaptability is affected more by the time and energy involvement of daily hassles than either the negative influence or the positive influence of daily hassles. In other words, the more time and energy involvement of the daily hassles, the higher the family flexibility.

Family cohesion is influenced more by the negative influence of daily hassles than the time and energy involvement and the positive influence of daily hassles. In other words, the more negative the influence of the daily hassles, the lower the family unity.

It is not surprising that the indicators of stressors for the current study (daily hassles) are significantly related to family adaptability and family cohesion. As expatiated in the review of literature, other studies have found family adaptability and family cohesion to be
significantly affected by stressors, although the studies mentioned in the literature review used life events as the indicator of stressors (Lavee et al., 1985; and Molgaard, 1985). The finding that the positive influence of daily hassles is positively related to reported managerial behavior must be interpreted circumspectly since as discussed in the review of literature, the relationship between stressors and transformations has not been explicitly studied.

**Inputs-to-outputs**

Two of the indicators of daily hassles were found significantly related to family health symptomology. As hypothesized, the negative influence of daily hassles is positively related to family health symptomology. That is, the more negative the influence, the more symptoms a family exhibits.

The positive influence of daily hassles is also significantly related to family health symptomology, but the direction of this relationship is opposite of the one anticipated. The positive influence of daily hassles is positively related to family health symptomology indicating that the more positive the influence of daily hassles, the more symptoms a family exhibits.
This direction of this relationship is puzzling. A possible explanation for this finding is the idea of stress pile-up or accumulative stressors as coined and developed by McCubbin and Patterson (1983) in their Double ABCX model of the family stress process. That is, the amount of change occurring is more disturbing to the family than the positiveness or negativeness of the changes. In other words, the positive aspects of daily hassles negatively effect family health (more symptoms) because these stressors, though positive, require family adjustment.

Because two of the three indicators of daily hassles significantly predicts family health symptomology, the relationship between daily hassles and family health symptomology is partially confirmed by the current study. These findings are not surprising since as discussed in the review of literature the relationship between stressors (including daily hassles) and health (more stressors, more symptoms) is well-documented in family stress research (Billings & Moos, 1982; DeLongis et al., 1982; DeLongis et al., 1988; Grant et al., 1987; Husaini et al., 1982; Lee, 1986; Lewinsohn & Talkington, 1979; Molgaard, 1985; Monroe, 1983; Pearl & Stuening, 1976; Reich et al., 1988; Stone & Neale, 1984; Weinberger et al., 1985; and Zarski, 1984). These findings also verify the
input-to-output relationship theorized by Deacon and Firebaugh in their family resource management conceptual framework.

The controversy concerning the confounding of the relationship between daily hassles and family health as described in the review of literature can be partially addressed by the results of the current study. The results of this study indicate that the time and energy of daily hassles is not significantly related to family health symptomology. The daily hassle variables that include more emotive (positive influence and negative influence) responses are significantly related to family health symptomology. These findings suggest that two dimensions of daily hassles, positive and negative influence, may be confounded to family health symptomology. Further exploration of the dimensions of daily hassles is needed in order to resolve this controversy.

Transformations-to-outputs

Only one of the relationships between transformations and outputs is significant. Reported managerial behavior is negatively related to family health symptomology.

As mentioned earlier in the review of literature, the relationship between reported managerial behavior and
family health symptomology has not been tested. This finding, however, indicates that effective managerial behavior enhances family health as measured by symptomology. In other words, fewer symptoms are manifested by families that report a higher managerial behavior score.

Because only one of the three hypothesized relationships between transformations and outputs is significant in the current study, the theoretical proposition that transformations as measured by reported managerial behavior, family adaptability and family cohesion affect outputs as measured by family health symptomology is not substantiated.

Negative Findings

Inputs-to-transformations

Of the hypothesized relationships between inputs (daily hassles) and transformations (reported managerial behavior, family adaptability and family cohesion), few were found to be statistically significant. In fact, of the nine gamma parameters, six are not significant.

Two of the daily hassle variables, time and energy involvement and negative influence, do not significantly
predict reported managerial behavior. Since studies in family resource management have not explicitly studied the number and types of family goals and events, this finding must be explicated judiciously.

Two of the daily hassles variables, negative and positive influence, do not significantly predict family adaptability. Two of the daily hassles variables do not significantly predict family cohesion. Neither the time and energy involvement or the positive influence of daily hassles is statistically significantly related to family cohesion in the current study. These findings are unexpected because previous studies have found a significant relationship between stressors (inputs) and family adaptability and cohesion (Lavee et al., 1985; and Molgaard, 1985).

Of the three indicators of inputs, the positive influence of daily hassles is the only variable that is not significantly related to either family adaptability or family cohesion. The flexibility and unity of a family is not affected by the positive aspects of daily stressors.

**Inputs-to-outputs**

One of the indicator of inputs is not statistically significantly related to family health symptomology. The
time and energy involvement of daily hassles is not a significant predictor of family health symptomology. As discussed in the previous section of this chapter, the more neutral daily hassle dimension of the three daily hassles variables, time and energy involvement, is not significantly related to family health symptomology. As previously mentioned, this finding indicates that the attributes of daily hassles are important and should be examined further.

**Transformations-to-outputs**

Because only one of the three indicators of transformations significantly predict family health symptomology, the relationships between family adaptability and family health symptomology, and family cohesion and family health symptomology are not verified by the current study. The theoretical proposition that transformations affect outputs is not entirely supported by the results of the current study. This finding is unexpected in the current study as other studies have found family adaptability and family cohesion to be significant predictors of family health (Lavee et al., 1985; Molgaard, 1985; and Olson, 1983a).
In the results of the current study, the only significant parameters involved in the decomposition of effects are the following variables: the positive influence of daily hassles, reported managerial behavior, and family health symptomology. Of these three variables, the direct effect of the positive influence of daily hassles on family health symptomology is much stronger than the indirect effect of the positive influence of daily hassles on family health symptomology via reported managerial behavior. This finding is not supportive of the primary hypothesis of the current study. The mediating ability of reported managerial behavior (as an indicator of transformations) is not verified by the results of the current study.

The other parameters involved in the decomposition of effects have at least one path estimate in the determination of the indirect effects that is not significant indicating that the estimate may not be statistically significantly different than zero. In other words, although the relationship between the negative influence of daily hassles and family health is significant (the direct effect), four of the six parameters involved in the determination of the indirect effects are not
significant. These relationships are the negative influence of daily hassles and reported managerial behavior, the negative influence of daily hassles and family adaptability, family adaptability and family health symptomology, and family cohesion and family health symptomology. In order to avoid misleading inferences involving these insignificant parameters, the strength of the direct effects relative to the indirect effects will not be discussed.

Because the direct effect of the time and energy involvement of daily hassles is not significantly related to family health symptomology, it would be fallacious to discuss the comparison of the direct and indirect effects of the relationship between the time and energy involvement of daily hassles and family health symptomology. Of the six parameters involved in the determination of the indirect effects of the relationship between the time and energy involvement of daily hassles and family health symptomology, four are not significant. These parameters are the time and energy involvement of daily hassles and reported managerial behavior, the time and energy involvement of daily hassles and family cohesion, family adaptability and family health symptomology, and family cohesion and family health symptomology.
CHAPTER 8. SUMMARY AND CONCLUSIONS

This chapter summarizes the current study and presents the major findings. At the end of this chapter implications for future research are expatiated.

Purpose

The purpose of the current study was to empirically examine a comprehensive model of family resource management. The conceptual framework used in the present study was the Deacon and Firebaugh (1988) family resource management theoretical model. The components of the Deacon and Firebaugh model are inputs, transformations and outputs. In order that the three components of the Deacon and Firebaugh theoretical model were represented in the current study, variables from another area of study, family stress, were incorporated into the empirical model of the current study. The theoretical proposition that the current study tested was that family well-being, as measured by family health symptomology (an output), is influenced by daily hassles (inputs), but the influences of these inputs is mediated by the transformations of managerial behavior, family adaptability and family
Procedures

The data for this study were obtained from the regional project entitled "Family Resource Utilization as a Factor in Determining Economic Well-Being of Rural Families". Although eight states were involved in the project, the current study only uses data from Iowa respondents. During the Spring of 1988, the data were collected through mail surveys. Total usable questionnaires from the family money manager were 291. The response rate was 33 percent.

In the current study, the original 291 cases were reduced to 185. Questionnaires were eliminated if the respondents were not from an intact couple and if the daily hassles inventory was not completed.

Three variables were used to represent inputs. Three variables were also used to represent transformations. One variable was used to represent outputs.

The three variables used to measure inputs were: 1) the time and energy involvement of daily hassles; 2) the positive influence of daily hassles; and 3) the negative influence of daily hassles. The current study used a
recently developed daily hassles inventory (Norem, et al., 1988a). Each variable was factor analyzed and items that loaded less than 0.4 were removed. The resulting factor scores were used to create each of the three daily hassle variables.

The three variables used to measure transformations were: 1) reported managerial behavior; 2) family adaptability; and 3) family cohesion. A 10 item index was used to measure the variable representing reported managerial behavior. FACES III (Olson et al., 1985) was used to measure family adaptability and family cohesion.

The variable used to represent outputs was family health symptomology. A 16 item family health symptomology inventory developed by Norem, et al. (1988b) was used to measure family health symptomology.

The LISREL statistical package was used to test the empirical model of the current study. LISREL was selected because of its capacity to simultaneously analyze multiple variables of the same endogenous construct. It allows for the correlation (not causation) of endogenous variables in a model.
Testing the Hypotheses

The Primary hypothesis

Inputs-to-transformations-to-outputs The results of the current study did not support the primary hypothesis. In other words, the influence of daily hassles on family health symptomology was not mediated by the three measures of transformations.

Of the nine possible indirect effects, only one of the measures of transformations (reported managerial behavior) had significant parameter estimates involving both an indicator of input (the positive influence of daily hassles) and the indicator of output (family health symptomology). This study found that the direct relationship between the positive influence of daily hassles (inputs) and family health symptomology (outputs) was stronger than the indirect relationship between the positive influence of daily hassles (inputs) and family health symptomology (outputs) as mediated by reported managerial behavior.

Although all the parameters involved were not statistically significant, one of the nine indirect effects was greater than the direct effect. The direct effect of the time and energy involvement of daily hassles family
health symptomology is weaker than indirect effect of the
time and energy involvement of daily hassles on family
health symptomology as mediated by family adaptability.

In general, the indirect effect of inputs on outputs
were very weak. Only one of the parameters involved in the
decomposing of effects was greater than .01.

The Specific hypotheses

Inputs-to-transformations Of the nine specific
hypotheses involving inputs and transformations, only three
of these hypotheses were supported by the results of the
current study. Thus, the theoretical proposition that
inputs as measured by daily hassles influence
transformations as measured by reported managerial
behavior, family adaptability and family cohesion was only
partially confirmed by the current study.

Inputs-to-outputs Of the three specific hypotheses
involving inputs and outputs, two were supported by the
results of the current study. The findings of the current
study verify the hypothesized relationship between inputs
and outputs.

Transformations-to-outputs Of the three specific
hypotheses involving transformations and outputs, only one
was supported by the current study. The theoretical
proposition that transformations influence outputs was not substantiated by the current study.

Major Findings and Conclusions

The major findings of this study are that inputs as measured by daily hassles affect both transformations and outputs. The use of reported managerial behavior as an important indicator of transformations is also a major finding of the current study.

Inputs-to-transformations

The three dimensions of daily hassles affect the measures of transformations differently. The variable that represents the time and energy involvement dimension of daily hassles is a significant predictor of family adaptability, but not either reported managerial behavior or family cohesion. The variable that represents the positive influence dimension of daily hassles is a significant predictor of reported managerial behavior, but not either family cohesion and family adaptability. The variable that represents the negative influence dimension of daily hassles is a significant predictor of family cohesion, but not reported managerial behavior or family
adaptability. These findings lend credence to the idea proposed by Kanner et al. (1981) that the dimensions of daily hassles are important aspects for researchers to consider when studying stressors.

Inputs-to-outputs

The three measures of daily hassles also affect family health symptomology differently. A contribution of the current study is that the daily hassle variables involving a more emotive response are the variables significantly related to the health of the family as perceived by the money manager through emotional and physical symptoms of the members in the household.

Again, this finding points out the need for further exploration of the dimensions or attributes of stressors. The confounding of stressors and health will be better understood through this exploration.

Reported managerial behavior as an indicator of transformation

Another major contribution of the current study is the significance of the relationships between the positive influence of daily hassles and reported managerial behavior, and reported managerial behavior and family
health symptomology. Future studies in family resource management should continue to incorporate an indicator of managerial practices into their models. Future family resource management studies should also include variables such as family adaptability and family cohesion that represent the processes of the personal subsystem in order to learn more about the evolving values and developing capacities of family members.

Although the current study applies a family resource management conceptual framework (Deacon and Firebaugh, 1988), future studies in family stress should include an indicator of "managerial" (planning and implementing) processes to measure transformations, or in the terminology of family stress theory, coping or mediating resources (Boss, 1987; Lavee et al., 1985; McCubbin & Patterson, 1983; & Pearlin et al., 1981).

Implications for Future Research

Because the results of the current study were not supportive of the primary hypothesis, several questions are raised. First, are important variables missing from the empirical model of the current study? Second, are the variables included in the empirical model of the current
study the best indicators of the theoretical constructs? Third, were the methods of data collection in the current study the most propitious? Last, is the theoretical model of the current study logically and realistically conceptualized? Future research in family resource management should address these questions.

**Question 1: Are important variables missing?**

A response to the first question is that the current study did not incorporate any socioeconomic-demographic characteristics. Previous family resource management studies have found that socioeconomic-demographic variables, such as gender, age, education, household size, and income, significantly related transformations (Barclay, 1970; Hira & Mueller, 1987; Garrison & Winter, 1986; Huguley, 1976; Maloch & Deacon, 1970; Mumaw & Nichols, 1972; Newton, 1979; Sahlberg, 1977; and Titus et al., 1989).

In these studies, however, the justification or rationale for these characteristics as inputs is missing. Also missing is the classification of these variables into the components of inputs: demands and resources. The following type of inquiry is not addressed: Is age a demand or resource? If age is a demand, why or how?
If the purpose of research is theory building, then the placement of variables must be explained. Without this type of inquiry, the validity of the Deacon and Firebaugh or any other family resource management conceptual framework cannot be determined.

Perhaps socioeconomic-demographic variables should have been included in the current study. Socioeconomic-demographic variables were not included in the current study because it was felt that the three dimensions of daily hassles would reflect these characteristics. The daily hassles inventory included all aspects of family life, not just a few characteristics.

Another response to the first question is that additional variables representing outputs could have been incorporated into the empirical model of the current study. Indicators that represent other dimensions of family well-being that could have been included are net worth (economic well-being) and quality of life (satisfaction).

**Question 2: Are the current variables the best indicators?**

A response to the second question raised by the results of the current study is that some of the variables of the empirical model of the current study could have been operationalized better. Molgaard (1985) found that a
discrepancy score between real and ideal for family adaptability and family cohesion a better indicator of transformations than actual levels of family adaptability and family cohesion. In the future, variables that use discrepancy scores could be used to operationalize concepts such as reported managerial behavior.

Another response to the second question is that the variable used to measure reported managerial behavior favors family financial matters. Perhaps additional questions that concern managerial tasks and activities that involve other family resources should have been included in the questionnaire.

A third response to the second question is that the variable used to measure daily hassles need to be further analyzed. Although the first-order (Pearson product-moment) correlation between these variables was low, partial correlational and exploratory factor analyses may indicate that these three dimensions really only represent two attributes.

Question 3: Is the method of data collection the most propitious?

A response to the third question presented is that the data of the current investigation are from a
cross-sectional study. Causal ordering with cross-sectional data is difficult to assert. The use of longitudinal data would have facilitated the causal ordering of the variables used in the empirical model of the current study because of the inherent time dimension. For example, inputs at time one predict outputs at time two because time one occurs prior to time two. The variables representing transformations could either be from time one, time two, or a combination of both time one or time two.

Another response to the third questions is concerning the method of data collection. The current study used data that were collected by a mail survey. When using mail surveys, the researcher does not know if the respondents understood the questions in the survey instrument. If the data of the current study were gathered from either personal or telephone interviews, the respondents would have had the opportunity to ask clarifying questions.

Question 4: Is the conceptual model valid?

A response to the last question from the results of the current study is that the Deacon and Firebaugh conceptual model should certainly not be considered invalid or poorly conceptualized because the results of the current study were not found to be entirely supportive. Perhaps,
the variables of the current study were placed poorly. For example, the positive and negative influence of daily hassles may actually be an indicator of outputs and the time and energy influence of daily hassles an indicator of transformations.

Another reason that the results of the current study are not entirely supportive of the Deacon and Firebaugh (1988) theoretical framework is that the respondents of the current study may be bias toward individuals that were not feeling "hassled" and who perceive themselves and other family members as healthy. Potential respondents who were experiencing poor health and/or extreme stress when the questionnaire arrived in the mail may have not taken the time and energy to complete the survey which in itself could be considered a daily hassle.

A third possible reason that the results of current study did not validate the Deacon and Firebaugh (1988) family resource management model is that the sample of the current study is not representative of the population. In other words, the sample of present study may not only be bias, but also unrepresentative. In the sample of the current study, the percent of elderly respondents is larger than the national average. Developmental theory would suggest that the managerial processes of families with an
elderly money manager would be qualitatively different than families with a non-elderly money manager. Another concern is the applicability of daily hassles, family adaptability and family cohesion with a higher than average percent of elderly respondents. Future studies need to explore the relevance of these variables for families with only elderly members.

Even if the results of the current study verified the Deacon and Firebaugh theoretical framework, additional studies are needed. These studies should include the same variables of the empirical model of the current study operationalized both the same way and in different ways as well as other variables.
REFERENCES


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ACKNOWLEDGEMENTS

This dissertation is dedicated to the memory of Janet Cuthbertson loving friend and role model who died unexpectedly Friday, April 20, 1990.
APPENDIX. PARAMETER DESCRIPTIONS

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<th>Parameter</th>
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<tr>
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</tr>
<tr>
<td>Gamma12</td>
<td>The positive influence of daily hassles and reported managerial behavior</td>
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<tr>
<td>Gamma13</td>
<td>The negative influence of daily hassles and reported managerial behavior</td>
</tr>
<tr>
<td>Gamma21</td>
<td>The time and energy involvement of daily hassles and family adaptability</td>
</tr>
<tr>
<td>Gamma22</td>
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<tr>
<td>Gamma23</td>
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