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MORPHOSTATIC AND MORPHOGENIC PLANNING BEHAVIOR
IN FAMILIES: DEVELOPMENT OF A MEASUREMENT INSTRUMENT

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

by

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* * * * *

The Ohio State University

1975

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	ii
VITA	iv
LIST OF TABLES	vii
 Chapter	
I. INTRODUCTION	1
Statement of the Problem	1
Purposes	1
Assumption	3
Substantive Hypotheses	3
Exploratory questions	3
Limitations	3
Need for the Study	3
II. REVIEW OF RELATED RESEARCH	5
Theoretical Development	5
Attributes of morphostatic management systems	8
Attributes of morphogenic management systems	11
Definition of planning	12
Approaches to planning	12
Planning related actions	14
Actions associated with morphostatic planning	15
Actions associated with morphogenic planning	16
Related conceptual frameworks	17
Summary	18
III. DESIGN OF STUDY	20
Background for Design of Study	20
Relationship of Study to Systems Model of Home Management	20
Hypotheses and Exploratory Questions	21
Development of the Questionnaire	26
Item development	26
Pilot test	26
Questionnaire revisions	27
Procedures	27
Test group selection	27

Chapter	Page
Administration of questionnaire	28
Method of Analysis	29
Scoring	29
Coding	29
IV. FINDINGS	31
Description of the Respondents	31
Analysis of the Data	35
Validity	36
Reliability	36
Factor Analysis	36
Interpretation of factors	38
Relationships of factor scores and demographic and satisfaction variables	48
Summary	54
V. SUMMARY, CONCLUSIONS, AND IMPLICATIONS	57
Implications	60
APPENDICES	
A. QUESTIONNAIRE ON GOAL EMPHASIS AND RESOURCE EMPHASIS PLANNING SUBMITTED TO HOME MANAGEMENT EXPERTS FOR EVALUATION	61
B. REVISED QUESTIONNAIRE SUBMITTED TO HOME MANAGEMENT UNDER- GRADUATE STUDENTS	69
C. QUESTIONNAIRE USED WITH THE SAMPLE	74
D. CODING OF RESPONSES TO THE QUESTIONNAIRE	82
E. CORRELATION MATRICES	85
REFERENCE LIST	92

LIST OF TABLES

Table		Page
1	Characteristics of Morphostatic and Morphogenic Management Systems	9
2	Parallel Statements Illustrating Morphostatic and Morphogenic Planning Behavior	22
3	Age of Respondents and Husbands to Nearest Birthday	31
4	Highest Level of Education Attained	32
5	Respondent's Report of Employment Status	33
6	Stage in Family Life Cycle	33
7	Number of Children	34
8	Total Family Income for 1974	34
9	General Satisfaction	35
10	Communalities of Statements	37
11	Items and Loadings for Factor I: Morphostatic Family Planning Behavior - Highly Money-Related	39
12	Items and Loadings for Factor II: Morphogenic Family Planning Behavior - Highly Money-Related	41
13	Items and Loadings for Factor III: Family Coping with Demands	43
14	Items and Loadings for Factor IV: Community Commitment (Bi-polar)	44
15	Item and Loadings for Factor V: Individual Plan Flexibility (Bi-polar - MS)	46
16	Items and Loadings for Factor VI: Resource Maximization (MG)	47
17	Items and Loadings for Factor VII: Family Adherence to Rules (Bi-polar - MS)	49
18	Items and Loadings for Factor VIII: Individual Flexibility (Bi-polar - MG) or Individual Coping With Demands	50
19	Chi-Square Tests of the Canonical Variates With Successive Roots Removed	51
20	Factor Structure for the First Canonical Variate	52
21	Factor Structure for the Second Canonical Variate	53

Table		Page
22	Factor Structure for the Third Canonical Variate	53
23	Factor Structure for the Fourth Canonical Variate	54

CHAPTER I

INTRODUCTION

In order to provide families with assistance in their management, it is vital that effective management behaviors and means for developing these behaviors be identified. There is a growing body of literature on the theory of morphogenic (open/adaptive/organic) systems versus morphostatic (closed/mechanistic) systems of management. Morphogenic systems are defined by Buckley (1967, p. 58) as "those processes which tend to elaborate or change a system's given form, structure, or state". Such systems are believed by a variety of writers to deal more effectively with environmental turbulence, technological changes, and concerns of individuals within organizations (Kast and Rosenzweig, 1973) than are morphostatic systems. Morphostatic systems are defined by Buckley (1967, p. 59) as "those processes in complex system-environment exchanges that tend to preserve or maintain a system's given form, organization, or state." The organization with a relatively morphostatic system is more likely to work effectively where there is little turbulence in its environment, where demands are specific and relatively unchanging over time, where effective routines are well established, and where changes in inputs and expected outputs are few. Buckley (1967), Terreberry (1968), Satir (1972); and others claim that openness and adaptability; i.e. morphogenesis, are the keys to viability of sociocultural systems of which the family is one.

Statement of the Problem

Purposes

The primary purpose of this study was to develop an instrument which would permit classification of family planning related behavior according to degree of morphostasis or morphogenesis. Relationships between planning related behavior and the following variables were also investigated.

Family variables:

- Income
- Stage in family life cycle
- Number of Children at home

Respondent variables

- Education Level
- Employment Status
- Satisfaction

Maloch and Deacon (1966) proposed a systems approach to the study of household management. In their model, they identified planning as a major process in the throughput of the household managerial sub-system of the family system and defined planning as setting standards concerning demands and determining the sequence in which tasks or parts of tasks are to be performed to meet demands. The systems approach provides an opportunity to view management as a totality while emphasizing one component, such as planning. Maloch and Deacon (1970) tested their model by investigating the planning and controlling components and their attributes.

A system is a set of interrelated elements dependent on one another for their functioning and separated from their environmental systems by a boundary. The openness or closedness of a system is determined by the permeability of its boundary and by the willingness and ability of the system to interact with environmental systems by varying its inputs and outputs. There are continuous pressures from outside the family system for it to take on more demands (input) and to use more of its resources (output). There are opportunities for the family management system to exploit resources (inputs) in its environment or to exchange other resources for them. The family management sub-system is also continuously called upon to receive inputs in the form of goal demands from the family's personal sub-system (Maloch and Deacon, 1966). Admission of inputs to the management sub-system is a planning related behavior. The degree to which the management sub-system permits the flow of inputs and outputs across its boundary indicates its openness or closedness.

Openness of a system requires morphogenic functioning of the system; an adapting of structure is needed in order to cope with the changing nature and quantity of matter, energy, and information that constitute the inputs and outputs. A relatively closed system is characterized by morphostasis; fixed structures or slowly changing ones are needed to limit inputs and maintain relatively fixed outputs.

Most families are subject to rapid societal, political, economic, and technological changes that are occurring in this country as well as to internal changes in human resource capacity, needs, goals, and crises. Does the theory that adaptability is necessary for system viability apply to family systems? Can the openness of home management behavior be measured? These are among the central issues that could be examined if a measure of openness and closedness of management systems is developed.

Hypotheses for this study were substantive rather than statistical. From the literature on morphostatic and morphogenic management systems, statements were developed which were expected to load on factors describing the two management system types. The emergence of the expected dimensions through factor analysis would provide rationality for the further examination of the substantive hypotheses. The assumption, hypotheses and exploratory questions with which this study is concerned are given below.

Assumption:

Planning related behavior reported by homemakers can be classified along a continuum between morphostasis and morphogenesis.

Substantive Hypotheses

1. Morphostatic planning is characterized by the dimensions identified in Table 1 and illustrated by statements in Table 2.
2. Morphogenic planning is characterized by the dimensions identified in Table 1 and illustrated by statements in Table 2.

Exploratory questions:

1. Is there a relationship between reported planning related behavior and overall feeling of life satisfaction?
2. Is there a relationship between reported planning related behavior and: income, family life cycle stage, number of children at home, education level of respondent and employment status of the female homemaker?

Limitations

Any conclusions drawn can be applied only to the test group used in the study until further investigation is done. This study represents a beginning step in the development of a measurement device. The measure used will require several stages of refinement and replication among other family groups.

Data were collected from groups of homemakers. Some met in members' homes in the evening where lighting and space for writing were not always ideal. Self-report questionnaires limit the probability of obtaining complete behavior information since people do not always behave like they believe they behave and it is not always possible to accurately remember how one behaved or predict how one would behave in a given situation.

Need for the Study

There are some available measures of openness/closedness of belief systems, of rigidity of personal beliefs (Rokeach, 1960), and of conceptual systems (Harvey, 1966). Brown (1966) and Douglass (1975) developed frameworks for examining boundary permeability of business organization systems, a planning related behavior. Maloch and Deacon (1970) investigated flexibility as an attribute of the planning components, standards and sequencing, and found flexibility of standards to be related to location of residence, occupation of wife, and persons per room in a non-market situation. They found flexibility of sequencing to be related to health of the homemaker and index of social

position. Kanter and Lehr (1975) and Satir (1972) identify characteristics of open and closed family systems from detailed observations of families. None of these researchers proposed to develop a comprehensive measure of the morphostatic and morphogenic character of management behavior in families, and no other studies were found in which this had been done.

Planning is recognized as an essential management process -- one in which commitments are made to standards and sequence of action for meeting demands. Information, including information about demands, availability of resources, alternatives possible and positive and negative feedback essential to system viability, is processed as plans are made. Planning related behavior should indicate a family manager's predisposition toward openness or closedness.

A classification instrument would provide for the possibility of future testing of the relationship between planning style and family well-being. If it is possible to predict well-being from planning style in various situations, possibilities for modifying planning styles could be investigated.

In this dissertation, Chapter II presents a review of pertinent literature, and the study design is described in Chapter III. The findings are included in Chapter IV while conclusions, implications and recommendations are discussed in Chapter V.

CHAPTER II

REVIEW OF RELATED RESEARCH

The literature related to management systems characteristics and planning in particular was reviewed to determine whether any available research models would be useful in the present study. This section summarizes writings and their relationship to the investigation that was undertaken.

Theoretical Development

The family, as a socio-cultural system, maintains its viability insofar as it effectively uses resources to meet internal and environmental demands. The family system responds to positive feedback by encouraging deviations from former structure, values, goals, standards, and relationships. Such deviations are intended to strengthen. Conversely, when negative feedback occurs, the family could correct deviations that might tend to weaken the family system.

The family management sub-system receives demands and resources from the family system and the environment and transforms these inputs into met demands. The satisfaction which the family receives from met demands depends on how well the management sub-system is performing. The dynamic nature of the family system and its supra-system make the task of managers in that system very complex, requiring a high level of information processing and the ability to influence the way in which resources will be used. Home managers probably are not necessarily natural leaders. They have not been chosen on the basis of their managerial competence but are required to perform as managers by reason of their position in the family system. An examination of the literature on family systems characteristics and approaches to management was helpful in preparing a method of classifying home managers according to their degree of ability and willingness to cope with change.

Buckley (1967, pp. 58-59) describes two basic system processes, morphostasis and morphogenesis, which may be applied to the study of home management systems. He defined morphostasis as "those processes in complex system-environment exchanges that tend to preserve or maintain a system's given form, organization, or state." Morphogenesis is defined as "those processes which tend to elaborate or change a system's given form, structure, or state." Morphostasis is a system's response to negative feedback, while morphogenesis is a system's response to positive feedback.

Because internal and environmental changes occur for the family system, Buckley stresses the importance of the system's ability to initiate new structures to accommodate positive aspects of changes and reduce negative effects. Various alternatives in responding to changes may be under taken. For example, with respect to a morphogenic approach, Speer points out:

Morphogenesis can take the form of change in intercomponent relations (greater autonomy and decreased constraint); qualitative changes in the nature of relationships (such as between a sexually maturing son and his mother); changes of governing values, purposes, and criterion standards (moral values, occupational goals); basic changes in internal and external effector operations (the increased earning power of the adolescent); and the ascendance of component or sub-systems with different properties and attributes in the governing or management of the system (such as a graduate student offspring still living at home). (Speer, 1970, pp. 267-268).

Speer also emphasizes that in order to act morphogenically, the family system must be willing to receive a wide range of views which could very likely conflict with their own values.

Buckley (1967, p. 130) states that social structures create for themselves "conflicts of interest, ambiguous standards, role discrepancies, and failure to achieve goals" requiring continual reorganization in order to maintain viability. He further maintains that:

In an open system, then, the 'normal operation' of its institutions constantly generates an input of variety and strains thereby contributing to a continuous process of 'structure-elaboration' and reorganization. Not only are such inputs normal to such a system, they are inherent features contributing to, though not guaranteeing, its viability. (p. 130)

A system becomes self-destructive when the structure does not change in relation to changing inputs and automatic internal changes.

As important as morphogenesis is to viable open systems, the necessity for morphostatic processes is not excluded. Self-directed changes in system structure are made in relation to other parts of the structure that are held constant at a given time; perhaps they are made in order to preserve some other portion of the system structure that is essential to system viability. The relative degree of importance of morphogenic to morphostatic processes in a socio-cultural system is related to the internal and external pressure for change and opportunities for positive change.

Steidl and Bratton refer to the stability of "a structure or framework around which other events are organized" (1968, p. 83) as a means for providing security and predictability around which nonroutine events are anticipated. They suggest that considering the consequences of commitments before they are made is necessary in order to avoid the gradual building up of an overcommitment. They also

emphasize that awareness of the sources of change affecting families is essential if the family is to control time and that this awareness constitutes a personal cost of work.

Steidl and Bratton further suggest that the degree of flexibility of the events in a family can be imagined on a continuum with relatively few events at each extreme. Relatively inflexible events are described not only as giving stability to family life but also as limiters for other events. The level of a family's resources may depend on adherence to certain inflexible resource commitments, such as the commitment which is necessary for earning a living, that which must be made to maintain owned goods, and the commitment of resources for educating children and adults. Morphostasis may be said to be operating when there are more relatively inflexible impingements upon a family than would be necessary for keeping the system together. Morphogenesis is possible when inflexible constraints are kept to a low level.

Tallman (1970) hypothesizes that, although open channels of communication are necessary for effective family problem solving, so also is a centralization of authority for coordinating efforts and for elaborating the interaction among family members. This illustrates a combination of morphostatic and morphogenic structures.

Terreberry (1968) stresses the importance of system adaptation, particularly for organizational systems with turbulent environments in which "the accelerating rate and complexity of interactive effects exceeds the component systems' capacities for prediction and, hence, control of the compounding consequences of their actions." (p. 593). Within the family system perhaps internal turbulence has as much, if not more, effect on the need for adaptability (morphogenesis) than does environmental turbulence. A central purpose of the family system is to meet internally generated demands. In contrast, most other formal organizations or systems may respond more to environmental demands (from stockholders, consumers, political constituents).

Brown (1966, p. 321) states that the relative permeability of a system's boundaries affects the degree to which knowledge and values from the external environment are brought into the system. He adds that:

If the boundaries effect a tight screening of both information and individuals so that only those people and pieces of information which reinforce the current internal values are allowed in, then the organization may facilitate internal agreement among its members. However, at the same time it may lose its position in its environment,...

Simon (1964) proposed a way of looking at alternative generation in decision-making that possibly has a bearing on a system's tendency toward morphostasis. He indicates that the relatively closed organization is likely to identify one overall goal, the goal of those in the upper level of the hierarchy, while the more open organization considers a set of constraints in developing its decision-making

strategy. He says that the constraints which a particular decision-maker considers to be more goal-like are used to generate alternative solutions to reaching the goal. The other constraints are used as alternative testers to eliminate any alternatives generated but judged not to be realistic. Although Simon does not refer specifically to morphogenic and morphostatic systems, his concepts of alternative generators and testers may be useful in identifying dimensions of these two types of systems. Alternative generators in morphostatic systems might generally be the limited resources. In morphogenic systems, value based objectives might be the alternative generators and limited resources the alternative testers. If this is the case, morphogenic systems should generate a wider field of alternatives before the testing process begins than would be true in morphostatic systems.

Kast and Rosenzweig (1973, pp. 315-318) summarize characteristics of closed/stable/mechanistic (or morphostatic) organizational systems and open/adaptive/organic (or morphogenic) organizational systems from writings of several authors. Their theory of contingency management as well as the writings of Bennis, Burns, and Stalker (Shepard, 1972) are useful in developing the characteristics for the two types of systems as shown in Table 1.

Attributes of morphostatic management systems

A morphostatic management system has been defined as a socio-cultural system that strives to maintain its form, structure, and organization. Writers in organization systems and family systems have sought to identify some of the attributes of a system classified as morphostatic, mechanistic, or relatively closed. The degree to which a sociocultural system behaves morphostatically is relative as are the characteristics attributed to a morphostatic system. A summary of the characteristics of morphostatic systems as they influence planning related behavior is included in Table 1.

The environmental suprasystem of any system consists of all systems which interrelate in any way with the system of emphasis. Systems interrelate with one another by receiving one another's outputs as inputs. The suprasystem of a morphostatic socio-cultural system is considered to be placid; that is, "goods and bads are relatively unchanging in themselves and are randomly distributed" (Terreberry, 1968). The system of emphasis has a relatively closed boundary, and the inputs from the environment are predictable. The system has standard procedures for dealing with these inputs. The organization of which the management system is a sub-system has few but clearly understood and unchanging goals established by authoritarian decision-maker(s). It seeks to obtain these goals through efficient processes that have been assigned to various members. Most families in this country are likely to be in a relatively stable external and internal environment only for short periods at a time due to change in life cycle stages, ages of family members, and careers as well as technological changes. Therefore, purely morphostatic family systems cannot be maintained.

TABLE 1
CHARACTERISTICS OF MORPHOSTATIC AND MORPHOGENIC MANAGEMENT SYSTEMS

Morphostatic	Morphogenic
<p>I. <u>Standard setting and sequencing</u> - rigid</p> <ol style="list-style-type: none"> 1. One or two persons or an authority makes the decisions about standards and sequencing. Authority structure is hierarchical. 2. Rigid rules guide standard setting and sequencing decisions. 3. There is a narrow range of acceptability in standards and sequencing of activities. 4. Changing of standards and sequencing is difficult; maintains status quo. <p>II. <u>Commitment to current system structure</u> - high</p> <ol style="list-style-type: none"> 1. There is a high commitment to current demands. 2. Resources are allocated first to goals to which the system is already committed. 3. Plans are rigid. 4. There is preoccupation with resource limitations and established goals. <p>III. <u>Boundary maintenance</u> - rigid</p> <ol style="list-style-type: none"> 1. New demands are accepted only if <ul style="list-style-type: none"> -there are leftover resources, -resources increase, -they are forced upon the system 2. Influx of new technology and information cannot be assimilated. 3. Creativity and innovation are stifled, resources not fully utilized. 	<p>I. <u>Standard setting and sequencing</u> - flexible</p> <ol style="list-style-type: none"> 1. All system members who are capable of participating do so. 2. Flexible internal criteria guide decisions about standards and sequencing. 3. There is a wide range of acceptable standards and sequence 4. Standards are changed with relative ease. <p>II. <u>Commitment to current system structure</u> - low</p> <ol style="list-style-type: none"> 1. Current demands can be relatively easily replaced with new ones. 2. New demands are evaluated with present demands in determining how resources should be used. 3. Plans are flexible. 4. Attention is given to alternatives for increasing resources to accommodate new demands. <p>III. <u>Boundary maintenance</u> - relatively open boundary</p> <ol style="list-style-type: none"> 1. Selective internal criteria are devised for setting limits of adaptability to environmental impingements. Demands are often admitted before resources to meet them are apparent. 2. Large quantities and varieties of information are processed continually. Boundaries are expanded to include previously deviant demands. Constant variation of inputs. 3. Creativity is encouraged; new alternatives are generated; diversity is assimilated; resources are fully utilized.

TABLE 1: CHARACTERISTICS OF MORPHOSTATIC AND MORPHOGENIC MANAGEMENT SYSTEMS (continued)

Morphostatic	Morphogenic
<p>IV. <u>Adjustment to new demands</u></p> <ol style="list-style-type: none"> 1. Limitation of resources underlies the generation of alternatives for meeting new goals. 2. Negative feedback is utilized to assure that new demands do not jeopardize accomplishment of current goals. 3. Events (demands forced upon the system) are likely to result in lowering important standards, dropping important goals, and overtaxing current resources, sacrificing. 4. Overall well-being is lowered when an event must be accommodated. 	<p>IV. <u>Adjustment to new demands</u></p> <ol style="list-style-type: none"> 1. Goal achievement underlies generation of alternatives with resource limitation becoming an alternative testing device. 2. Positive feedback is utilized to modify the plan or the goals when this seems to be desirable. 3. Events are responded to by attempts to increase resources first followed by dropping only the least important goals and standards if necessary. 4. Attempts are made to increase the utility of available resources to avoid reduction in overall well-being resulting from event demands.

Sources: Bennis, Warren G. "The Decline of Bureaucracy and Organizations of the Future," pp. 106-116, and Burns, Tom and G.M. Stalker. "Mechanistic and Organic systems," from Shepard, Jon, Ed. Organizational Issues in Industrial Society, Englewood Cliffs, N.J.: Prentice-Hall, 1972; Buckley, Walter. Sociology and Modern Systems Theory. Englewood Cliffs, N.J.: Prentice-Hall, 1967; Harvey, O.J., ed. Experience, Structure, and Adaptability. New York: Springer Pub. Co., Inc. 1966. Chapters 2 and 4; Kast, Fremont E. and James E. Rosenzweig. Contingency Views of Organization and Management. Chicago: Science Research Associates, Inc. 1973, p. 315-318; Speer, David C. "Family Systems: Morphostasis and Morphogenesis, or "Is Homeostasis Enough?" Family Process, 9(3), September, 1970, pp. 259-278.

From the characteristics of morphostatic management systems in Table 1, some descriptions of planning related actions have been identified and are discussed later in this chapter. A system can maintain its structure and form only by controlling the emergence of new goals and insuring against loss of resources. This is encouraged by: 1) limiting the amount of decision making authority that is delegated to all decision-makers except those at the top of the hierarchy, 2) establishing rules and regulations that must be closely followed in order to receive rewards and avoid punishments, 3) emphasizing utilization of negative feedback by quickly correcting any deviations from the previously made plans, 4) discouraging rather than rewarding individual creative thinking and experimentation in the use of resources, 5) coping with new, unavoidable, external demands by sacrificing internal comforts, and 6) overtaxing present resources or using resources that have been saved specifically for emergencies rather than being used for innovation. Some morphostatic processes are essential in all management systems to assure that the performance of tasks necessary for meeting basic demands at a given time is not jeopardized by a shift in resource allocation. The balance between morphostatic and morphogenic processes for optimum functioning of a management system varies from one system to another.

Attributes of morphogenic management systems

Morphogenesis refers to healthy growth and is an evolutionary process that enables a socio-cultural system to modify its structure to accommodate continually changing demands and resources. Table 1 summarizes dimensions of morphogenic management systems.

The boundary of the morphogenic system is highly permeable while still maintaining the separateness of the system. Boundary permeability offers the advantage of readily obtaining inputs and producing outputs to resolve the stress of demands or reduction in resources. Another advantage is that the system can take advantage of opportunities that would be lost if the boundary were less permeable. There are, of course, some disadvantages to a highly permeable boundary and morphogenesis does not necessarily result just because a system is open. Extremely open systems can run the risk of not being selective enough in input and output transactions with environmental systems. Truly morphogenic systems are able to put new and different inputs into perspective with existing demands and resources.

A morphogenic system maintains its functionality and viability in the face of rapid and complex change because of its capability and willingness: 1) to receive new inputs while maintaining its identity and function, 2) to receive information which conflicts with its own views and evaluate it against internally determined criteria for usefulness in meeting demands, 3) to resolve conflicts which are inevitable with the internal and external changes confronting the system, 4) to discard structures and operations that become dysfunctional, 5) to utilize deviation amplifying (positive) feedback which allows the system to proceed in different directions from the ones previously planned and to reach different and more suitable ends, and 6) to

creatively generate, test, and select alternatives for meeting demands through planning and controlling resource use.

Definition of planning

Planning is recognized as one of the central functions of the managerial system. Because plans must exist in order for other managerial actions to occur, planning related behaviors have been selected for developing a scale for classifying morphostatic and morphogenic system activity.

Maloch and Deacon (1966), the first scholars in the field of home management to propose a systems framework for use in research, define home management as "planning the use of resources and then implementing the plans to meet demands." (Deacon and Firebaugh, 1975, p. 47). They define planning to consist of decisions about standards and the sequence in which tasks or parts of tasks are to be performed to meet demands. They further describe planning to include decisions about whether, how and when demands will be met.

Johnson, Kast, and Rosenzweig (1967, p. 21) indicate that "Planning is the process by which the system adapts its resources to changing environmental and internal forces." Ward (1970, p. 9) defines planning as "the purposeful programming of action, with reference to available resources and the predictive context in which the proposed action is likely to be taken." He discusses dynamic planning as "continuously programming the exploitation of accessible resources in the context of a changing world with future needs or benefits in mind through an understanding of corporate identity." (Ward, 1970, p. 32)

These definitions of planning seem to reflect the theory concerning morphogenic managerial systems, but Kast and Rosenzweig (1973) have edited a collection of articles which support the thesis that sociocultural systems fall on a continuum in their management -- including their planning -- between adaptability and rigidity. Rigidity is illustrated by standing plans which have been consciously derived sometime in the past and continue to be useful in the view of the manager. Standing plans inhibit normal growth of the system when internal and external conditions change to the extent that new plans are needed, but they are useful for the smooth operation of all systems in areas that are unaffected by change at any given time.

Approaches to planning

Simon's (1964) discussion of alternative generators and alternative testers, mentioned earlier, has a bearing on standard setting and sequencing. Morphostatic planning places more emphasis on resource availability in generating a field of alternative standards and sequences of tasks for meeting demands while morphogenic planning emphasizes intrinsic or instrumental values as alternative generators.

McCaskey (1974) defines "planning with goals" in very much the same way that morphostatic planning is defined here. This might be a somewhat confusing term without his explanation that "planning with goals" actually refers to inflexibility of acceptable end results. He states that:

...instead of performing exhaustive examination of issues, if people are committed to the goals there can be a forceful converging of efforts to meet deadlines and to achieve goals. People given such plans spend less time exploring alternative futures...planners using this process...are less likely to discover a wholly new goal or opportunity. (pp. 282-283)

McCaskey's "planning without goals" or "directional planning" assumes identification of boundaries for commitment establishing a domain or intrinsic pattern of movement from which "goals might be named as a secondary process." Goals are selected because they lie along this intrinsic pattern of direction but are easily substituted for by other goals along the same path. He implies positive feedback when he says that one chief characteristic of directional planning is that "as the individual or organization interacts with the environment, the domain and direction change as a result." (p. 284)

Directional planning requires higher energy cost than "planning with goals" to maintain flexibility because of the volume of information that must be processed. It entails greater stress for people because of greater ambiguity about purposes and roles. Therefore, McCaskey suggests that the two types of planning are generally combined in organizations, the planning style of emphasis depending on the stage of development of the organization, the organization doing the planning, and the stability of the environment.

Terreberry's (1968) discussion of the effect of environmental conditions on need for openness of a system and the contention by Buckley and others that internal changes affect need for structural change in a system support the ideas that planning actions might be identified on a continuum between morphostasis and morphogenesis.

Ackoff (1974) in discussing planning as dealing "with a system of problems as a system -- synthetically, as a whole --" identifies four planning postures, three of which are pertinent to planning related behaviors as they are discussed here. According to Ackoff (p. 194):

Reactivists are moved more by their hates than loves. Their orientation is corrective, not aspirational; their analysis and policy making are remedial--they move away from undesired states rather than toward ones that are desired.

He describes "preactivists" as planners who do not believe that they can control the future but attempt to control the effects of the future on their lives. Interactivists, on the other hand, "have a make-it-happen attitude toward the future" (p. 196). They believe in their ability to create the future rather than just forecasting it by changing the systems in a way that prevents problems and creates

opportunities. Interactionists "are as willing to manipulate a system's structure, functioning, organization, and personnel as they are to manipulate its resources" in order to "maximize a system's ability to learn and adapt." (p. 194)

The planning abilities identified by Berger, Guilford, and Christenson (1957) including general reasoning, logical evaluation, verbal comprehension, originality, ideational fluency, associational fluency, adaptive feasibility, judgement, prediction, elaboration, and ordering are probably influential in determining whether the family can devise plans that will result in a limited change in satisfaction when new demands occur. If measures for these planning abilities could be adapted for planning in families and if planning related behavior can be classified as to degree of morphostasis and morphogenesis, it would be interesting to see if any relationships exist between planning style and planning abilities.

Planning related actions

Planning occurs as a result of a change in input to the managerial sub-system which is disruptive or tension producing to the system. Changes which cause disruption are the following:

- 1) reduction in actual or perceived availability of resources,
- 2) addition or altering of demands to make them more costly,
- 3) alteration of resources such as more money but less free time or change in timing of pay periods,
- 4) reduction of demands or altering to make them less costly, and
- 5) increase in resources.

As a planning related action, do some families or individuals, as a rule, act morphostatically and not accept a potential demand input into the management system unless sufficient resources can be immediately perceived for meeting the demand? Do other planners generally permit "excessive" demands to cross the boundary into the management system and then make a special effort in their planning to find, to free, or to create extra resources to meet the demands? This planning related activity, boundary maintenance, is close to the decision-making concerning whether or not demands can be met referred to by Deacon and Firebaugh (1975, p. 167). The system determines whether to reject or act on a pressure to change.

Brown (1966, p. 323-324) called "the manner in which an organization determines the kind and amount of information allowed to cross its boundaries" a coding process which "reflects the norms, values, and subculture of the organization." He refers to adjustment processes that are used by systems when there is an information overload from unexpected or extremely rapid changes in inputs. Summarizing from Miller and Meier, Brown provides the following alternative ways of responding to information overload:

1. The information can be omitted, not processed at all.
2. It can be processed correctly without making adjustments.

3. Response can be delayed until later.
4. Information can be filtered to omit that considered to have low priority.
5. Standards are lowered because of too little time for processing.
6. Processing can be decentralized, handled by sub-units.
7. The system can move away or escape from the situation.
8. The system can dissolve.

The action that a system acting morphostatically performs to reject a pressure for change is a planning related action. For example, this could involve moving away from the pressure; a family sending a child to one college could change to another college when tuition is increased. Morphogenic planning related actions might include a search for additional resources before withdrawing to go to another college.

Gross, Crandall, and Knoll (1973, p. 304) state that "Events which are beyond the control of the family, whether they occur within or outside it, constitute new opportunities or constraints which should be recognized by the planner(s)." Actions taken once the input is a part of the managerial system are likely to be different for morphostatic and morphogenic planners.

Essential planning actions include those concerned with setting standards that reconcile demands with resources that are or can be made available (Deacon and Firebaugh, 1975, p. 167; Maloch and Deacon, 1970). The attribute of standards that places the planning action on the continuum between morphostatic and morphogenic is flexibility; the more flexible the standard without overall loss in well-being to the family, the more morphogenic the planning action.

Flexibility in sequencing of tasks or parts of tasks to meet demands also affects the classification of a sequencing planning action as more morphostatic or more morphogenic.

Actions associated with morphostatic planning

In keeping with the characteristics of morphostatic management systems, morphostatic planning actions could include the following:

1. An administrator/chief authority/head decision-maker would establish rules which would dictate standards and sequence of tasks. In a family, one such rule might be "We do not buy anything until we can afford to pay cash for it" or "We will not commit more than 15% of our take-home pay to installment payments." Most families have such rules, but the flexibility with which they may be changed when the situation demands change determines their classification as morphostatic or morphogenic. Kanter and Lehr (1975) associate rigid rules with closed system families. Satir (1972, p. 116) says closed systems have out-of-date, inhuman rules to which needs are made to conform. Tallman (1970) hypothesizes a need for an authority in family planning actions but emphasizes the importance of flexible

power structure and possibilities for changing leadership roles.

2. Resources would be allocated first to goals or other demands to which the family is already committed. This implies that resource use becomes habitual and is reviewed only when it becomes obvious that something is not going according to plans.

3. New goals are admitted to the management system only if resources appear to be free after prior obligations are met. These free resources could come from savings, underutilization of resources in the past, accomplishment of some goals which no longer require resource use, or an increase in overall level of resources. This is likely to result in some lost opportunities, but it has the advantage of reducing the risk of not having enough resources to accomplish basic goals. An example of this might be that a family would begin to make plans for a daughter to enter college in the fall only after the daughter has a summer job so that she can earn money for tuition and books.

4. Demands that tend to deviate from established ones are rejected if possible. The system makes a concerted effort to remain closed to possible requests for use of resources. Examples: a) A mother plans to do grocery shopping at a time when she does not have to take her children along to avoid their requesting unplanned for foods. b) A family member declines to join an organization because of the time commitment that might be required.

5. If new demands must be accommodated, it is done by lowering standards and/or spreading resources thinner if new resources are not available. This implies that goals are not re-examined to determine whether resources could be reallocated. No major effort is made to find or create additional resources. An overall loss in satisfaction would result. Example a) A rise in property taxes might result in a reduction of expenditures on books and magazines with a loss in satisfaction previously obtained from books and magazines. Example b) Illness of a child results in extension of a mother's work day with no compensating time off.

Actions associated with morphogenic planning

In morphogenic managerial systems, the planning related activities could include the following dimensions:

1. Standard setting and sequencing of tasks may be done by one or more persons with consideration for the welfare of the total system. Any rules governing these planning actions are subject to review and possible change by any and all managers at any time.

2. External and internal pressures for change are evaluated equally with existing commitments against internally and autonomously determined criteria for measuring their worth as inputs to the system. This implies a willingness and capability to "get out of" previous commitments -- to avoid being locked into dysfunctional

operations.

3. New goals may be admitted to the managerial system even when no excess resources are available if they meet the required criteria. Goals, rather than resource limitations, are alternative generators.

4. Alternatives are generated for a) obtaining and creating additional resources, b) freeing previously committed resources, and c) increasing the utility of those resources already being used.

5. Standards of previous goals and sequence of tasks are flexible enough to accommodate new demands and provide for creation of additional resources with minimal satisfaction loss and generally with an increase in overall well-being.

6. When change occurs, alternatives are sought which will re-establish order in the system, generally at a different level from the previous one. It is assumed that the system suffers little, if any, loss of satisfaction when there are new demands and may gain from the experience. Example: A raise in property tax results in a decrease in spending on books and magazines, but the family goes to the public library for books and magazines and discovers additional resources and sources of satisfaction there.

Related conceptual frameworks

Speer (1970, p. 271) refers to several studies that point to the relationship between openness of family communication, an attribute assumed to be related to morphogenesis, and normal--as opposed to disturbed--families. He also reports "more equal participation in family discussions, less rigid patterning of interaction, and thus, less order and limiting organization" for normal than for disturbed families. He reports that S. L. Miller in an unpublished paper proposes a family functionality-dysfunctionality continuum on which the dysfunctionality end would be defined by morphostatic processes and the functionality end by morphogenic processes. However, Speer goes on to say that he knows of no evidence to show whether "exceptionally well-functioning, broadly and deeply satisfied, fulfilled families" are primarily morphostatic or morphogenic in nature. Hill (1971) agrees with Speer that measures for the phenomenon of family morphogenesis are needed, but neither knows of the availability of such measures. Satir (1972) maintains that through her vast experiences in counselling families she has identified characteristics of open and closed family systems very similar to those already presented in this review. Kantor and Lehr (1975) conducted an indepth observation study of nineteen families and classified them as open, closed or random systems.

Kast and Rosenzweig (1973, pp. 314-319) developed a model, representing "the present status of contingency views of organization and management." They indicate that hypotheses about the relationships proposed in the model have not been and may never be conclusively proven but that the model may be used to study the tentative patterns

of relationships of many different types of organizations. Each of the articles included in their edited book provides suggestions for studying organizational systems in relation to their degree of morphostasis or morphogenesis, but none provides a measure suitable for analyzing a family managerial system.

Several researchers in the area of personality characteristics and attitude measurements have developed Likert-type tests that measure openness and closedness of thinking and conceptual complexity. Notable among these are Rokeach's Dogmatism Scale and the Stanford-Gough Rigidity Scale (Rokeach, 1960) and the This I Believe (Harvey, 1966) test. The Conceptual Systems test by Harvey and Hoffmeister (1971) seems to have been developed from the This I Believe test. If a scale can be developed for morphostatic and morphogenic planning styles, it would be interesting in the future to examine whether or not there is any correlation among the dogmatism, rigidity, conceptual systems and planning style tests.

Douglass (1975) tested a model designed to investigate the interrelationships of interface transaction variables (flows of men, money, material and information between firms and key environmental groups) and firm performance variables (sales and net profits) when external environmental variables are similar for the firms involved. Three hundred questions were designed to quantitatively measure systems flows between the firm and seven classes of environmental systems (government, customer, supplier, competitor, labor, equity holder, and other). A matrix was formed in such a way as to allow summing of interface class scores and summing of flow type scores to be used in analysis.

Barclay (1970) in her study of organization of household activities by home managers defines organizing to include the sequencing part of planning as well as controlling activities. Her questionnaire asked home managers to rate the importance of various organizing activities to an ideal homemaker and to themselves in a Likert-type test. Another section asked how much like the respondent various organizing actions were. Some of the activity statements describe morphostatic or morphogenic planning related activities. However, since her purposes were different, no analysis in terms of these two types of planning was done.

The components of management study by Maloch and Deacon (1970) involved interviews of 180 homemakers concerning, among other attributes, flexibility in planning. Respondents were asked to indicate what they would do if they could not carry out plans they had made. Answers were classified as to degree of flexibility.

Summary

The review of literature represents an effort to establish a theoretical base for the present study. Recent writers in family and organization management systems propose two general types of management

systems that have been called morphostatic and morphogenic for purposes of this study. Their dimensions have been hypothesized as they relate to planning behavior in management systems. No suitable instruments for measuring degree of morphostasis or morphogenesis were found although some related conceptual frameworks were useful in developing the instrument discussed in the following section.

CHAPTER III

DESIGN OF STUDY

The study was designed to develop an instrument for measuring morphostatic and morphogenic planning related behavior as reported by female homemakers. This section includes the model used and details.

he stages of development of the questionnaire and the method used in administering the questionnaire to collect data for testing the hypotheses and examining the exploratory questions.

Background for Design of Study

Originally, styles of planning were classified as goal emphasis or resource emphasis. Goal emphasis planners were defined as those who keep the management system of the family open to important goals in spite of initial disequilibrium in the system due to limited resources. Resource emphasis planners were defined as those who try to maintain equilibrium in the system by refusing to admit goals until sufficient resources are assured. A further literature investigation indicated that different terminology had been used in organization management and general systems theory to describe a similar concept of the extremes in management styles. Terms that closely describe goal emphasis planning are open/adaptive/organic/morphogenic systems. Closed/static/mechanistic/homeostatic/morphostatic systems would more likely have resource emphasis managers. Since these terms are more familiar in the literature, they were used in this study, and the concepts were broadened to include more than the system boundary permeability implied in the terms goal emphasis and resource emphasis. However, since business organization systems differ in many ways from family systems, only characteristics of the management styles described in the literature that also relate to family management systems were examined. These appear in Table 1 in the previous chapter. Statements which describe morphostatic and morphogenic planning behavior are listed in Table 2.

Relationship of Study to Systems Model of Home Management

The theoretical model for this study is based on one developed by Maloch and Deacon (1966) and refined by Deacon and Firebaugh (1975, p. 53) and is summarized as follows:

Systems Concept	Home Management System	<u>Planning Related Behavior</u>	
		Morphostatic*	Morphogenic*
I. BOUNDARY MAINTENANCE*		Relatively closed	Relatively open
A. Input	1) Resources	Little seek- ing to ex- pand	Vigorous seeking to expand
	2) Demands - goals	Highly con- trolled	Readily re- ceived
B. Output	1) Used Resources	Slowly changing	Frequently changing
	2) Met Demands		
II. Throughput*	A. STANDARD SETTING AND SEQUENCING		
	1) Who does?	Authority	All capable
	2) Flexibility	Low	High
	3) Rules	Rigid	Flexible
	B. ADJUSTMENT		
	1) Due to changed inputs	Difficult; frequent loss of well-being	Relatively easy; ex- pansive
	2) Due to feedback	Deviation- correcting	Deviation- amplifying
		III. COMMITMENT TO CURRENT SYSTEM STRUCTURE*	
		High	Low

All capitals indicates that the concept is one of the major divisions in Table 1: Characteristics of Morphostatic and Morphogenic Management Systems.

* The asterisk indicates that there is an interrelationship between commitment to current system structure and the general systems concepts and other planning related behavior.

Hypotheses and Exploratory Questions

Substantive hypotheses proposed in this study are the following:

- I. Morphostatic planning is characterized by the dimensions identified in Table 1 and illustrated by statements in Table 2.
- II. Morphogenic planning is characterized by the dimensions identified in Table 1 and illustrated by statements in Table 2.

TABLE 2
PARALLEL STATEMENTS DESCRIBING MORPHOSTATIC AND MORPHOGENIC PLANNING BEHAVIOR

Morphostatic	Morphogenic
1. One family member makes plans for spending our money and gives instructions to the other family members.	1. Planning for spending money is shared by family members.
2. Whenever the children do jobs around the house, I redo them if they do not meet my expectations.	2. I am satisfied if the jobs children do around the house do not meet my expectations for myself.
3. The person in the family responsible for how money is spent decides whether or not family members can have what they ask for.	3. Decisions about whether we can spend money for some item not in the budget are made jointly by all family members concerned.
4. We try to keep spending for food, housing, clothing, etc. close to the average for families in our income group.	4. It is okay if our food, housing, and clothing costs are quite different from the average for families of the same income.
5. We try to keep the outside of our home looking like our neighbors expect it to look.	5. The way the outside of our home looks does not depend on what the neighbors think.
6. Good routines the children learn at home will be helpful to them later in life.	6. Most routines the children learn at home will probably change often as they go through life.
7. I generally choose brands of products that are 'tried and true' rather than unfamiliar brands.	7. I frequently buy new brands of products.
8. I know the daily schedules of each other family member.	8. I need to know schedules of other family members only when they affect my schedule.
9. The family tithes to the church.	9. Individual family members decide how much they should give to church and charity.
10. If I want a particular item that I cannot find in the stores, I come home emptyhanded.	10. If I cannot find a particular item I want in the stores, I can usually find a good substitute.
11. Having my plans interrupted is very disturbing.	11. If my schedule is disrupted, it is fairly easy to make a new one.
12. There is a set time and day for doing most household chores which we try to avoid changing.	12. The household routine can be easily changed to fit around unexpected opportunities and emergencies.

TABLE 2: PARALLEL STATEMENTS DESCRIBING MORPHOSTATIC AND MORPHOGENIC PLANNING BEHAVIOR (continued)

Morphostatic	Morphogenic
13. We often must settle for less than we expect because of emergencies, inflation, and the like.	13. Lowering of standards for a good reason is not upsetting.
14. If I get up 15 minutes late one day, family members are likely to be late to school or work.	14. If I get up 15 minutes late one day, routines can be adjusted so that family members will not be late to school and work.
15. If I have a plan, it keeps me from taking on new demands that might conflict with present goals.	15. If I have a plan, I feel free to change it to take care of new demands.
16. If a family member lost \$10, he/she would do without something that is important to him/her but not to the rest of the family.	16. If a family member lost \$10, we would adjust plans so that no family member would have to suffer much.
17. "Borrowing" from a fund set aside for food, taxes, etc. to buy things not in the budget is avoided.	17. We frequently "borrow" money from a fund set aside for food, taxes, etc. to buy things not in the budget.
18. If the refrigerator breaks and no other money is readily available, the savings for a vacation would be used for the refrigerator instead.	18. If the refrigerator breaks and the vacation fund is the only readily available money, some way would be found to pay for both vacation and refrigerator.
19. I always find some good reason for refusing to collect money door-to-door.	19. I am willing to collect money door-to-door for a worthy cause.
20. If I were a mother of preschoolers considering returning to work in the future, there would be no extra time for part-time work or refresher courses.	20. If I were a mother of preschoolers, I would make time for working part-time and taking refresher courses in case I should return to work full-time in the future.
21. The amount of money the family can afford to pay is the primary guide to amount of life insurance the family buys.	21. The money loss to the family if a family member should die is the main factor in deciding on amount of life insurance to buy.
22. I tend to avoid becoming active in community or church groups that might make unexpected demands.	22. I am in community or church groups requiring continual altering of plans to meet the requests of these groups.
23. When I buy something new, a strong consideration is how it fits in with what I already have.	23. I do not let presently owned items restrict my choice of color, style, etc. of new things I buy.
24. Plans for spending the income tax refund are made after the exact amount of the refund is known.	24. Plans for spending our income tax refund are made before the exact amount of the refund is known.

TABLE 2: PARALLEL STATEMENTS DESCRIBING MORPHOSTATIC AND MORPHOGENIC PLANNING BEHAVIOR (continued)

Morphostatic	Morphogenic
<p>25. It is often necessary for me to say "no" to requests in order to avoid overcommitment of my time.</p> <p>26. The family wants things we cannot afford.</p> <p>27. The children have aspirations that they probably will not attain.</p> <p>28. Plans are made for buying something only after it is obvious that the time and money are available.</p> <p>29. We accomplish more goals if we check the means available for getting them before deciding what we want.</p> <p>30. Money for food and time for preparation are carefully checked before fancy or expensive foods are planned for a meal with guests.</p> <p>31. Guests would be invited for meals more often if there were not time, money, and/or space limitations.</p> <p>32. Once a good money plan (budget) is established, an effort is made to carry it out without being tempted by additional wants.</p> <p>33. If the children want something that the parents approve of but cannot afford, they are encouraged to choose other goals to teach them to live at a level they can afford.</p> <p>34. Parents evaluate all purchases grade school children want to make before letting them have the money.</p> <p>35. Housing maintenance (repair) is delayed as long as possible because of time or money costs.</p> <p>36. When wants cost more money than is available, wants are reduced to make things balance.</p>	<p>25. I usually agree to requests that require commitment of time.</p> <p>26. Most really important wants can be worked into plans.</p> <p>27. The children are learning to be creative in reaching goals that might at first seem impossible.</p> <p>28. Plans are often made to do or buy something for which the time and money are not yet available since a way to increase resources can usually be found.</p> <p>29. Plans are made with the idea that more can be accomplished if higher aims are set.</p> <p>30. A special effort is made, if necessary, to fit special foods into the food budget and the time available for company meals.</p> <p>31. We find time and money for guest meals as often as we want to entertain.</p> <p>32. Plans for use of money are frequently changed to take care of new goals.</p> <p>33. If the children want something the parents approve of but cannot afford, we find a way to get it.</p> <p>34. The children receive allowances to buy agreed upon items and anything else within reason that they can afford.</p> <p>35. Housing maintenance is done on a regular basis to avoid major repairs.</p> <p>36. When wants cost more money than is available, attempts are made to increase income or to use something besides money to get them.</p>

TABLE 2: PARALLEL STATEMENTS DESCRIBING MORPHOSTATIC AND MORPHOGENIC PLANNING BEHAVIOR (continued)

Morphostatic	Morphogenic
37. When plans are being made to purchase a car, prices of various features and models are obtained before deciding which features are desired.	37. When plans are being made to purchase a car, desirable features are determined before prices are checked.
38. Money is the primary consideration in selection of housing for the family.	38. Features the family likes are more important than cost in selecting housing.
39. Wants beyond what we can afford are either changed to something that costs less or delayed until we can afford them.	39. Wants beyond what we seem to be able to afford are often obtained through a special effort to think up ways to get them.
40. There seems to be no way to have all the things we used to get with inflation as rampant as it is.	40. Since inflation has become so rampant, it has been necessary to depend more on non-money resources to maintain our level of living.
41. With the increase in cost of living, we use means other than money to get some of the things we used to buy.	41. With the increase in cost of living, we use means other than money to get some of the things we used to buy.
42. When money is scarce and time and skill are limited, it is difficult to think of ways to accomplish new goals.	42. There are other means of accomplishing goals when time and money are limited.
43. When I have too much to do in one day or week, I delay or delete some task.	43. When I have too much to do in one day or week, I delegate some tasks to someone else or hire someone to do them.

If the substantive hypotheses were supported by factor analysis, it was proposed to investigate the following exploratory questions.

1. Is there a relationship between reported planning related behavior and overall feeling of life satisfaction?
2. Is there a relationship between reported planning related behavior and income, family life cycle stage, number of children at home, education level of the respondent, employment status of the female homemaker?

Development of the Questionnaire

Item development

In order to determine whether or not the goal emphasis and resource emphasis concepts were clearly different, a questionnaire was developed to include 1) sets of forced choice statements with one goal emphasis statement and one resource emphasis statement in each set, and 2) statements related to case study situations that could be classified as goal emphasis statements or resource emphasis statements. These statements were submitted to ten graduate students and faculty members in home management, and they were asked to classify them as goal emphasis or resource emphasis in nature. These statements are included in Appendix A. From these statements, those that received a high degree of agreement -- not more than two of the experts disagreed -- were considered for inclusion in a forced choice, twenty-set questionnaire designed for classifying homemakers into morphogenic (goal emphasis) planners and morphostatic (resource emphasis) planners. In each set, a third statement representing non-planning was added. A copy of this questionnaire is in Appendix B.

Pilot test

This questionnaire was submitted to sixty-two home management undergraduates at California State University, Sacramento, at the end of the Fall Semester, 1974. All of the students taking the basic home management course were asked to participate and agreed to do so. They were asked to imagine themselves in the situations described, to choose the statement in each set which most closely described what they believed they would do, and to indicate on a one to three scale how much like their own anticipated planning behavior each selected statement was. They were also asked to evaluate the questionnaire for clarity of statements and to make notations of any suggestions for improvement of the instrument.

Some statements in the questionnaire were written from the viewpoint of a family with children. Since some of the students were not currently in that type of situation, their answers represented their beliefs about what they would do rather than what they actually do as planners. Their responses to the test were useful in modifying

the statements. Thirty-five of the students chose mostly morphogenic planning statements from the twenty sets; fourteen of the students chose mostly morphostatic planning statements; one student chose mostly non-planning statements. This reinforced the idea that the planning behavior of persons can be differentiated. Some students wrote such comments as "This is what I really do although another statement describes what I really should do."

Questionnaire revisions

Suggestions received on the pilot test and from the writer's dissertation committee were helpful in revising the statements. The statements were kept as short as possible. An attempt to eliminate the terms "I", "we", and "our" to avoid confusing respondents who lived in families where individual, rather than joint, decisions were usually made resulted in some awkwardly worded statements. Therefore, personal pronouns were retained in such cases.

As a result of further reading on scale formation and consultation with the dissertation committee and statistical consultants, a decision was made to use a five point Likert-type test, making the non-planning statements unnecessary.

A decision was also made to use factor analysis as a means for evaluating the statements as representing the two types of planning. Therefore, additional statements were generated to represent planning related behaviors corresponding to the characteristics found in the literature for morphostatic and morphogenic management systems. Eighty-six statements, half of them morphostatic and half morphogenic, were included. The statements and the planning characteristics they represent appear in Tables 1 and 2. The statements were randomly arranged in the questionnaire and attached with the directions to the questions designed to provide data for use in examining the exploratory questions mentioned earlier. (See Appendix C).

Procedures

Test group selection

The number of respondents desired was approximately three times the number of statement variables because factor analysis was to be used as a data reducing aid. In order to assure that respondents would be representing family planning behavior, persons living in families rather than single persons were sought. Female homemakers were chosen as respondents to reduce variability that might be due to position in the family. Although no attempt was made to exclude persons with very limited resources, neither was an attempt made to assure that the test group included homemakers from families with extreme resource limitations. Such families might plan differently if they had sufficient resources, and it was felt that this could be tested at a later time after the measurement device has been refined.

Homemakers asked to participate were members of various types of women's groups. Possible groups were identified through the Columbus, Ohio Chamber of Commerce list of women's organizations, the Cooperative Extension Service at The Ohio State University, notices of club meetings in Columbus newspapers, and personal contacts with people who were familiar with women's groups. Attempts were made to contact representatives of all identified groups believed to have membership primarily composed of women with children currently living in families. Many groups contacted could not participate because their programs were already planned for the time period of the data collection. A few representatives were not willing to ask their groups to participate, and some felt that their groups were not suitable because they were primarily older women whose children had been away from home for a long time.

Twenty-three groups agreed to participate either at one of their regularly scheduled meetings or at a special meeting. Forty-seven of the respondents were in four church groups. One hundred and twenty-five respondents were in eleven maternal-child oriented groups. Twenty-six of the women were in women's social-service groups. Nine were nutrition aides. Fifteen women were in a continuing education class.

All of the women attending each meeting were requested to participate but given the option of not participating if they objected to doing so. Less than ten women refused to turn in their questionnaires or did not complete enough of the questionnaire for it to be used. In three of the groups, members had to leave before having a chance to answer the questionnaire but asked if they could take it home and mail it in when they were finished. A mixture of mailed in and group answered questionnaires was believed to be unacceptable for data collection, thus the mailed questionnaires were not used.

Most participants came from throughout Franklin County, Ohio. Nine respondents were from Eastern Ohio. The fact that groups were selected from a less than complete list of all women's groups in Franklin County means that the test group was not representative of any definable population. The purpose of the study was to investigate whether or not dimensions of planning behavior would emerge from responses to 86 planning behavior statements, and a random sample was not considered essential for this purpose.

Administration of questionnaire

Questionnaires were answered by 252 members of 23 women's groups, each attending a meeting of her respective group. Some meetings were held in homes, others in public meeting rooms. The principal investigator administered the questionnaires to all groups except one. Due to a time conflict with another group meeting, another graduate student who had received detailed instructions administered the questionnaires to that group. The data were collected in April, May and June of 1975.

The same oral instructions were given to each group (see Appendix C). The planning statements were printed on optical scanner sheets with space provided for coding demographic and satisfaction data. A copy of the questionnaire is in Appendix D.

Each respondent was asked to indicate on a five point scale from NOT LIKE to EXACTLY LIKE the degree to which the described planning related behavior was like her family's behavior or her behavior. Demographic and satisfaction data were collected on a separate sheet and transferred later by the principal investigator to the optical scanner sheets. Time required for answering the questionnaire varied from twenty to forty-five minutes.

Method of Analysis

Scoring

The planning related behavior statements on the questionnaire submitted to the 252 respondents were scored on a 0 to 4 scale, 0 meaning NOT LIKE, 1 meaning SLIGHTLY LIKE, 2 meaning SOMEWHAT LIKE, 3 meaning A LOT LIKE, and 4 meaning EXACTLY LIKE. Factor scores for each respondent on eight factors emerging during the factor analysis mentioned below were obtained for use in the canonical correlations.

Coding

Coding for the demographic and satisfaction data may be found in Appendix D. Family life cycle stage was calculated from questions regarding number and ages of children at home and away from home. The stages calculated were called Pre-School Children only, School Age (some children of school age but none over age 18), Launching, and Empty Nest. A category for No Children was included but only four families fell into that category.

Education levels of the respondent and husband were coded from 1 to 6 with 1 being the highest level (5 or more years of college). This was done in order to fit the values into the Hollingshead formula for determining socioeconomic status. However, the descriptions respondents gave of husband's occupation were sometimes too vague to accurately classify them. Therefore, education of the respondent and family income were used as the two demographic variables to substitute for socioeconomic status in the canonical correlations discussed later. Since all of the other demographic and satisfaction variables except employment status and education level were coded from low to high or less to more, the signs of these two variables had to be changed in the canonical correlations.

A code indicating the group membership of the respondent was included on each respondent's questionnaire. IBM cards were punched directly from the optical scanner sheets, listed, and checked for errors by the principal investigator.

The SOUPAC program for principal components/principal axis factor analysis with oblique and orthogonal rotations was utilized. As shown in the correlation matrix in Appendix E, one (1) was used in the diagonal indicating that total variance was examined. A BMD common factor analysis program was also used with the data. Factors emerging were essentially the same as those emerging when SOUPAC program was used. However, the SOUPAC components analysis was somewhat easier to interpret. The purpose of the principal components analysis in this study was to arrive at some generalizations about the nature of planning behavior. It was hypothesized that dimensions (factors) described in the literature would result from an analysis of the responses to 86 statements designed to illustrate morphostatic and morphogenic planning related behavior. The items shown to be highly correlated in their responses would be presumed to reflect common characteristics. Child (1970, p. 9) points out that "The distinction between testing and creating hypotheses in factor analysis is not very sharp." In this study, the substantive hypotheses were generated from the literature. The component analysis was believed to be a useful method for verifying the hypotheses and perhaps elaborating them.

A multivariate test of the null hypothesis that two sets of variables are independent was needed for investigating the exploratory questions proposed. A program written by Dr. Janet Rice, faculty member in the Educational Development Department of The Ohio State University to measure canonical correlation was utilized to find the maximum likelihood correlations for the factor scores and the demographic and satisfaction data. Canonical analysis defines a set of independent dimensions accounting for correlations between two sets of variables. Pohlmann (1975, p. 88) states that "Canonical analysis achieves this purpose by solving for sets of weights, which when applied to each set of variables, will result in two composite variables (one for each set) that correlate maximally." These canonical correlations generate loadings indicating the relative importance of the variables in each set for interpreting the canonical variables.

CHAPTER IV

FINDINGS

A description of the sample, results of the component factor analysis of the responses to the planning behavior questionnaire, discussion of the item analysis of the statements, and results of canonical correlation of factor scores and demographic and satisfaction values are given in this section.

Description of the Respondents

Two hundred and fifty-two homemakers, members of twenty-three groups, comprised the respondents. All but three of the homemakers reported that they had children.

The mean age of respondents was 38 years and for their husbands it was 40 years. Only four respondents and five husbands were reported to be over age 60.

TABLE 3

AGE OF RESPONDENTS AND HUSBANDS TO NEAREST BIRTHDAY

Age group	Respondent		Husband	
	Number	Per cent	Number	Per cent
20 or under	0	0.0	0	0.0
21-25 years	8	3.2	4	1.6
26-30 years	51	20.2	36	14.3
31-35 years	60	23.8	49	19.4
36-40 years	40	15.9	39	15.5
41-45 years	27	10.7	32	12.7
46-50 years	30	11.9	33	13.1
51-55 years	16	6.3	20	7.9
56-60 years	10	4.0	10	4.0
61-65 years	3	1.2	4	1.6
Over 65 years	1	0.4	1	0.4
No response	6	2.4	24 ^a	9.5
Total	252	100.0	252	100.0

^aNo response for husband could mean no husband was present.

As is evident in Table 4, around 5 per cent of the respondents had not completed high school. Twenty-nine per cent completed high school, around 38 per cent had some college while around one in four had four or more years of college. Almost half of the husbands, in turn, had completed college; another one in four had some college, while only one in five had a high school education or less.

TABLE 4
HIGHEST LEVEL OF EDUCATION ATTAINED

Level of education	Respondent		Husband	
	Number	Per cent	Number	Per cent
8 years or less	6	2.4	6	2.4
1-3 years high school	7	2.8	6	2.4
Finished high school	73	29.0	35	13.9
Some college or trade school	96	38.1	66	26.2
4 yr. college degree	42	16.7	54	21.4
5 years or more college	20	7.9	56	22.2
No response	8	3.2	29 ^a	11.5
Total	252	100.0	252	100.0

^aNo response for husband could mean no husband was present.

Almost two-thirds of the respondents reported that they were not gainfully employed. Of the remainder, about 12 per cent were employed full-time and around 20 per cent were employed part-time. Almost all of the husbands were employed full-time. Among those who were not employed full-time were graduate students or retired men.

As indicated in Table 6, in the 140 families reported to be in the school age stage of the family life cycle no child was as old as eighteen years and none had left home. Twenty-four families, 9.5 per cent were reported to have pre-school children only. Thirty-four families, 13.5 per cent, were in the launching stage of the family life cycle, having some children still at home while others had already left or having only children over age eighteen still at home. Twenty-four, 9.5 per cent, were in the empty nest stage.

The mean number of children reported was 2.6; the mean number of children at home was 2.1. (See Table 7) Only three respondents reported having no children. Twenty-seven, 10.7 per cent, reported that they had no children still at home, and eleven did not respond to this question. Only eight respondents reported having more than four children at home.

TABLE 5

RESPONDENT'S REPORT OF EMPLOYMENT STATUS

Status	Respondent		Husband	
	Number	Per cent	Number	Per cent
Not gainfully employed, not seeking work	148	58.7	5	2.0
Not gainfully employed, seeking work	13	5.2	2	0.8
Employed part-time	50	19.8	6	2.4
Employed full-time	31	12.3	212	84.1
No response	10	4.0	27 ^a	10.7
Total	252	100.0	252	100.0

^aNo response for husband could mean no husband was present.

TABLE 6

STAGE IN FAMILY LIFE CYCLE

Stage	Number	Per cent
No children	4	1.6
Pre-school children only	24	9.5
School age	140	55.6
Launching	34	13.5
Empty Nest	24	9.5
No response ^a	26	10.3
Total	252	100.0

^aThis variable was calculated from information concerning ages of children at home and away from home. The high percentage of no response results from missing information in one or more of these categories.

TABLE 7
NUMBER OF CHILDREN

Number	At Home		Total	
	Number of Families	Per cent of Families	Number of Families	Per cent of Families
None	27	10.7	3	1.2
One	36	14.3	33	13.1
Two	99	39.3	107	42.5
Three	53	21.0	59	23.4
Four	18	7.1	23	9.1
Five	4	1.6	14	5.6
Six	3	1.2	5	2.0
Seven	1	0.4	4	1.6
Eight	0	0.0	0	0.0
Nine or More	0	0.0	2	0.8
No response	11	4.4	2	0.8
Total	252	100.0	252	100.0

Table 8 includes the 1974 total family income of the respondents. Only one respondent reported a total income for 1974 of less than \$3,000; she was an elderly widow. The mean income of the families of respondents reporting income was between \$14,000 and \$17,999. Forty-eight, 19 per cent, of the families had incomes in 1974 of over \$21,000.

TABLE 8
TOTAL FAMILY INCOME FOR 1974

Amount	Number	Per cent
Less than \$3,000	1	0.4
\$ 3,000 - \$ 5,999	10	4.0
\$ 6,000 - \$ 9,999	13	5.2
\$10,000 - \$13,999	56	22.2
\$14,000 - \$17,999	68	27.0
\$18,000 - \$20,999	41	16.3
Over \$21,000	48	19.0
No response	15	6.0
Total	252	100.0

A general question was asked concerning the respondent's belief about her family's level of satisfaction considering economic security, level of living, health, marriage and family life, accomplishment of personal aims, job situation, and the community and world situation. As shown in Table 9, almost half of the respondents indicated that they believed their families to be very satisfied or completely satisfied. Thirty-four respondents, 13.1 per cent, reported that their families were unsatisfied to some degree. Although they were not asked to account for their level of satisfaction, several women either circled one or more of the areas they were asked to consider or wrote a reason for dissatisfaction. Some reasons given were husband had recently died, in process of a divorce, and personal unhappiness with job opportunities. There is no way of determining how many of the women considered their own satisfaction rather than total family satisfaction in answering this question.

TABLE 9
GENERAL SATISFACTION

Levels	Number	Per cent
Completely satisfied	15	6.0
Very satisfied	107	42.5
Somewhat satisfied	69	27.4
Neutral (neither satisfied nor unsatisfied)	19	7.5
Somewhat unsatisfied	19	7.5
Very unsatisfied	9	3.6
Completely unsatisfied	5	2.0
No response	9	3.6
Total	252	100.0

Analysis of the Data

Responses to both morphostatic and morphogenic planning related behavior statements in the questionnaire were coded "0" for NOT LIKE, "1" for SLIGHTLY LIKE, "2" for SOMEWHAT LIKE, "3" for A LOT LIKE, and "4" for EXACTLY LIKE. The statements were examined for validity and reliability.

Validity

Content validity was checked by ten home management faculty members and graduate students during the development of the questionnaire. The statements chosen for inclusion illustrated planning related behavior described in the literature on theory of morphostatic and morphogenic management systems.

Construct validity was to be tested by the factor analysis to determine whether the statements generated loaded on factor-dimensions of morphostatic and morphogenic planning behavior. Construct validity cannot, of course, be demonstrated very substantially at this stage of development of a measurement instrument. However, some factors related to morphostatic and morphogenic planning did emerge and will be discussed.

Since no external measure of planning behavior was attempted, no statistical test of criterion-related validity was possible in this study. Proposed ways of testing criterion-related validity will be given in a later section.

Reliability

The Kuder-Richardson formula number 20 test for internal consistency was chosen for estimating reliability of the 86 statements. In order to do the necessary item analysis, a decision was required as to which values would be right answers. Since a value of "2" (SOMEWHAT LIKE) or above indicated that the described behavior was like the respondent or her family some of the time, values "2", "3", and "4" were chosen as right answers. The K-R 20 formula resulted in a reliability coefficient of .816 when all statements were taken together, .760 for morphostatic statements, and .734 for morphogenic statements when they were taken separately.

Child (1970, p. 42) suggests that a communality of .3 or less could mean that the variable is unreliable. A varimax orthogonal rotation of the eight strongest factors that emerged in the factor analysis described below was done providing communalities for the 86 statements. As shown in Table 10, 37 of the statements had communalities of .3 or less, and 49 had communalities above .3. No statement having a communality of .3 or less had a structure loading above .41 on any factor in the principal components/principal axis (oblique rotation) analysis discussed below.

Factor Analysis

The data for the 86 variables were factor analyzed using a SOUPAC computer program for principal components/principal axis factor analysis which orders the factors found according to amount of variance defined. The Binormamin program for oblique rotation was used with the first eight factors. Varimax orthogonal rotation of the eight factors was also accomplished. The factor loadings did not differ greatly from

TABLE 10
COMMUNALITIES OF STATEMENTS

.3 or less		Higher than .3	
Item number	Communality	Item number	Communality
1	.2737	4	.3233
2	.2801	6	.3151
3	.2966	8	.3391
5	.2974	9	.3212
7	.2481	13	.3801
10	.1840	14	.3729
11	.2781	16	.5045
12	.2861	17	.3937
15	.1135	21	.3657
18	.2724	24	.4121
19	.2837	25	.3587
20	.1861	27	.4414
22	.2577	29	.4170
23	.2324	30	.4518
26	.2404	32	.3444
28	.2302	36	.3624
31	.2133	38	.4499
33	.2634	39	.3779
34	.2910	40	.3527
35	.2587	42	.3749
37	.1755	43	.3461
41	.2709	44	.4592
46	.2976	45	.3157
51	.1175	47	.3244
53	.2880	48	.4452
60	.1949	49	.3832
63	.2522	50	.4512
64	.2982	52	.3536
66	.2639	54	.3238
67	.2809	55	.4036
68	.2434	56	.4250
70	.2719	57	.3952
71	.2395	58	.4755
76	.1952	61	.4073
80	.2610	62	.3368
81	.1276	65	.4927
82	.2095	69	.3455
		72	.4093
		73	.4468
		74	.4635
		75	.3319
		77	.4982
		78	.3934
		79	.3934
		83	.3219
		84	.4267
		85	.3443
		86	.4297

the oblique rotation factors.

The scree test proposed by Cattell (1966) and recommended for use with principal components factor analysis by Rummel (1970) and an examination of the statements loading on the factors led to the determination that eight factors should be rotated. Almost 33 per cent of the total variance in the 86 statements (variables) was accounted for by the first eight factor-dimensions. Using the rule of all eigenvalues greater than one, 29 factors would have been rotated explaining about 68 per cent of the total variance. This number was considered too large to be meaningful in this study. Since component factor analysis does not result in common factors, it should be understood that the term factors in this dissertation refers to factor-dimensions including common, specific, and random error variances. (Rummel, 1970, p. 112).

Substantive hypotheses had been proposed prior to the development of the statements, and the purpose of the factor analysis was to see if the previously identified morphostatic and morphogenic factors would emerge. Since this stage of development of the measurement instrument was exploratory, no statistical hypotheses were formulated for testing. The substantive hypotheses proposed were as follows:

1. Morphostatic planning includes the specific set of dimensions shown in Table 1 and illustrated by statements in Table 2.
2. Morphogenic planning includes the specific set of dimensions shown in Table 1 and illustrated by statements in Table 2.

Interpretation of factors

An examination of the high-loading statements on each factor resulted in naming of the eight rotated factors. Names of factors are tentative pending further investigations. In Tables 11 through 18, statements with pattern coefficients of $-.30 \leq .30$ are presented for their respective factors.

Factor I: Morphostatic Planning Behavior - Highly Money Related

Factor I included high loadings on morphostatic statements from each of the dimensions originally identified when the statements were developed (see Table 1) and was, therefore, labeled Morphostatic Planning Behavior. It was subtitled Highly Money Related because of the subject matter of most of the high loading statements. The only high negative statements are numbers 30 and 17, both designed to reflect morphogenic behavior. When the structure coefficients $-.45 \leq .45$ as well as the pattern coefficients are considered, only statements above number three in Table 11 should be used for interpretation of this factor. (Comrey, 1973, p. 226) However, the other statements in the table appear to reinforce the interpretation, but some have questionable reliability when Child's communality rule is applied.

TABLE 11

ITEMS AND LOADINGS FOR FACTOR I: MORPHOSTATIC FAMILY
PLANNING BEHAVIOR - HIGHLY MONEY-RELATED

Loadings		Item Number	Item	Hypothesized ^b Dimension	
Pat- tern	Struc- ture			MS	MG
.68	.64	16 ^a	Plans are made for buying something only after it is obvious that the time and money are available.	III	
.61	.58	38 ^a	When wants cost more money than is available, wants are reduced to make things balance.	III	
.61	.56	13.	"Borrowing" from a fund set aside for food, taxes, etc. to buy things not in the budget is avoided.	I	
.56	.52	21 ^a	Wants beyond what we can afford are either changed to something that costs less or delayed until we can afford them.	III	
.50	.47	49 ^a	Once a good money plan (budget) is established, an effort is made to carry it out without being tempted by additional wants.	II	
.48	.44	3.	Money for food and time for preparation are carefully checked before fancy or expensive foods are planned for a meal with guests.	IV	
.47	.44	12 ^a	When plans are being made to purchase a car, prices of various features and models are obtained before deciding which features and models are desired.	IV	
.47	.44	33.	Plans for spending the income tax refund are made after the exact amount of the refund is known.	III	
.43	.40	45.	Parents evaluate all purchases grade school children want to make before letting them have the money.	I	
.43	.40	53 ^a	If the children want something that the parents approve of but cannot afford, they are encouraged to choose other goals to teach them to live at a level they can afford.	IV	
.42	.39	23 ^a	If a family member lost \$10, he/she would do without something that is important to him/her but not to the rest of the family.	IV	
.42	.39	8.	We accomplish more goals if we check the means available for getting them before deciding what we want.	III	
.40	.37	2.	Money is the primary consideration in selection of housing for the family.	IV	
.38	.35	75.	When I buy something new, a strong consideration is how it fits in with what I already have.	I	
.36	.33	57.	There seems to be no way to have all the things we used to get with inflation as rampant as it is.	IV	
.35	.32	42.	We often must settle for less than we expect because of emergencies, inflation and the like.	IV	
-.34	-.32	30.	We frequently "borrow" money from a fund set aside for food, taxes, etc. to buy things not in the budget.	III	
.34	.31	19 ^a	There is a set time and day for doing most household chores which we try to avoid changing.	I	
-.33	-.31	17.	Plans are often made to do or buy something for which the time and money are not yet available since a way to increase resources can usually be found.	III	
.32	.29	7.	The person in the family responsible for how money is spent decides whether or not family members can have what they ask for.	I	

^aParallel statement loaded on Factor II.

^bSee Table 1.

Illustrating the rigid standard setting and sequencing dimension, numbers 45 and 7 imply that some authority figure makes the decisions about what children should buy and what the family can afford. This could be a necessary procedure in families where money resources are extremely limited and a less than optimal centralization of power in other families. Number 75 suggests a rule for standards of purchases. Number 19 describes commitment to a rigid sequence.

High commitment to current system structure is described by number 13 which suggests rigid plans and allocation of resources first to current demands. Number 49 also implies high commitment to a plan and the current demands it is designed to meet. As the literature indicates, this could result in lost opportunities but could also be a method for reducing the risk of not meeting basic demands.

Rigid boundary maintenance is illustrated by five high loading morphostatic statements. Two morphogenic statements that are parallel to two high loading morphostatic statements in this category load negatively on Factor I. They are numbers 30 (parallel to number 13) and number 17 (parallel to number 16). Numbers 16, 33, and 8 suggest that new demands are admitted to the system only if it is obvious that the means for meeting them are available. Numbers 38, 21, and 53 illustrate the squelching of desired goals rather than searching for ways to meet them if resources seem too limited.

Some demands get past the system boundary and must be accommodated in some way. Numbers 3, 12 and 2 indicate that the fact of resource limitation is paramount in developing the alternatives for adjusting to new demands. Numbers 23, 57, and 42 indicate that family or individual well-being suffers when new demands must be accommodated. The statements loading on this factor do not suggest creative responses to new demands.

Factor II: Morphogenic Planning Behavior - Highly Money Related

All statements with loadings $-.30 \leq .30$ on Factor II were designed to reflect morphogenic behavior and represent each of the dimensions proposed in Table 1. Although some statements loading on this factor were not specifically money related, most of them could be interpreted as requiring decisions about the use of money. Numbers 40 and 73 and perhaps numbers 61, 56, and 58 are exceptions. The morphostatic statements that were designed to be parallel to eight morphogenic statements loading on Factor II loaded on Factor I. (See footnotes on Tables 11 and 12). Structure coefficient loadings indicate that statements below number 40 are not good interpreters. Some of them had communalities below .3.

Number 11 indicates decentralized decision-making at least in relation to contributions. Numbers 40 and 73 describe flexibility in sequencing for both the family and the individual. The positive loading of number 61 on this factor cannot be explained since it suggests commitment to "tried and true" brands. Number 50 describes flexibility of plans.

TABLE 12

ITEMS AND LOADINGS FOR FACTOR II: MORPHOGENIC FAMILY
PLANNING BEHAVIOR - HIGHLY MONEY-RELATED

Loadings		Item Number	Item	Hypothesized Dimension ^b	
Pattern	Structure			MS	MG
.62	.57	56.	Most really important wants can be worked into plans.		III
.62	.56	50 ^a	Plans for use of money are frequently changed to take care of new goals.		II
.58	.53	47.	If the refrigerator breaks and the vacation fund is the only readily available money, some way would be found to pay for both vacation and refrigerator.		IV
.52	.48	17 ^a	Plans are often made to do or buy something for which the time or money are not yet available since a way to increase resources can usually be found.		III
.50	.46	55 ^a	Wants beyond what we seem to be able to afford are often obtained through a special effort to think up ways to get them.		III
.49	.45	40 ^a	The household routine can be easily changed to fit around unexpected opportunities and emergencies.		I
.48	.44	48.	We find time and money for guest meals as often as we want to entertain.		III
.41	.37	20 ^a	When plans are being made to purchase a car, desirable features are determined before prices are checked.		
.41	.38	11.	Individual family members decide how much they should give to church and charity.		I
.38	.35	61.	I generally choose brands of products that are "tried and true" rather than unfamiliar brands.	I	
.38	.35	73.	If my schedule is disrupted, it is fairly easy to make a new one.		I
.36	.33	37.	The money loss to the family if a family member should die is the main factor in deciding on the amount of life insurance to buy.		IV
.35	.32	35 ^a	If the children want something the parents approve of but cannot afford, we find a way to get it.		III
.33	.30	52.	There are other means of accomplishing goals when time and money are limited.		IV
.32	.29	58.	The children are learning to be creative in reaching goals that might at first seem impossible.		III
.31	.29	39 ^a	When wants cost more money than is available, attempts are made to increase income or to use something besides money to get them.		IV
.31	.28	28 ^a	If a family member lost \$10, we would adjust plans so that no family member would have to suffer much.		IV

^a Parallel statement loaded on Factor I.

^b See Table 1.

An open boundary is suggested by numbers 56, 17, 55, 48, 35 and 58. Some of the concepts implied are encouragement of creativity and belief that wants can be obtained if resources are fully utilized.

Numbers 47, 52, and 39 suggest that new demands are accommodated through attempts to increase resources or their utility rather than by reducing family satisfaction. Number 37 indicates that the goal is the primary alternative generator in the decision to buy insurance. Number 28 suggests that attempts are made to respond to unexpected events so that no family member's well-being will suffer.

Factor III: Coping With Family Demands

The loadings on Factor III were a combination of positive loadings on statements that had been described in Table 2 as morphostatic and those described as morphogenic. There was one high negative loading on a morphogenic statement and one on a morphostatic statement. The statements loading on this factor are concerned with responding to goals or events when there seems to be insufficient resources, primarily money. Morphogenic statements loading positively on Factor III suggest that the planning behavior includes substitution of other resources for money (numbers 27, 6, and 39), flexibility of planned money use (number 2), and admitting demands to the system before resource availability is known (number 1). Number 16, a negatively loading morphostatic statement, appears to reflect the same planning behavior as number 1. There is an indication that respondents scoring high on this factor would try a wide variety of solutions to attempt to cope with inadequate income and time yet without really meeting all demands. Four of the statements (numbers 48, 22, 26, and 46) indicate inability to meet demands even with the application of a variety of solutions. As the two types of planning behavior, morphostatic and morphogenic, have been defined in the literature, this factor is not clearly a dimension of either. One might conclude from the literature on contingency management that a person who scored high on this factor would tend to be morphogenic since the statements, when combined together, indicate a wide variety of attempts to make ends meet. If Comrey's interpretation rule is used, all but one statement used for interpretation is morphogenic. Numbers 27, 6, and 39 suggest the inclination to substitute other resources when money is not available for the demands one would prefer to buy. Numbers 30, 1, and the negatively loaded number 16 indicate a willingness to take a risk in using resources before they are actually available for the demand to be met. Numbers 48 (negative loading) and 26 (positive loading) were designated as morphogenic and morphostatic parallel statements. The loadings on these statements suggest a morphostatic inclination. Therefore, it would not be very safe to expect this factor to reflect morphogenic planning behavior. It has been tentatively named Family Coping with Demands in Table 13.

Factor IV: Community Commitment

Factor IV (see Table 14) generally involves personal time commitment to the community. All but the lowest two statements

TABLE 13
ITEMS AND LOADINGS FOR FACTOR III: FAMILY COPING WITH DEMANDS

Loading		Item Number	Item	Hypothesized ^a Dimension	
Pattern	Structure			MS	MG
.59	.57	27.	Since inflation has become so rampant, it has been necessary to depend more on non-money resources to maintain our level of living.		IV
.55	.53	30.	We frequently "borrow" money from a fund set aside for food, taxes, etc. to buy things not in the budget.		II
-.50	-.48	48.	We find time and money for guest meals as often as we want to entertain.		III
.49	.47	6.	With the increase in cost of living, we use means other than money to get some of the things we used to buy.		III
.48	.46	1.	Plans for spending our income tax refund are made before the exact amount of the refund is known.		III
.48	.46	22.	The family wants things we cannot afford.	III	
.37	.36	39.	When wants cost more money than is available, attempts are made to increase income or to use something besides money to get them.		IV
.37	.35	26.	Guests would be invited for meals more often if there were not time, money, and/or space limitations.	IV	
.35	.34	42.	We often must settle for less than we expect because of emergencies, inflation, and the like.	IV	
.34	.32	46.	Housing maintenance (repair) is delayed as long as possible because of time or money costs.	III	
-.32	-.31	16.	Plans are made for buying something only after it is obvious that the time and money are available.	III	

^a See Table 1.

TABLE 14

ITEMS AND LOADINGS FOR FACTOR IV:
COMMUNITY COMMITMENT (BI-POLAR)

Loadings		Item Number	Item	Hypothesized ^a Dimension	
Pat- tern	Struc- ture			MS	MG
.66	.66	65.	I usually agree to requests that require commitment of time.		III
-.60	-.60	77.	I tend to avoid becoming active in community or church groups that might make unexpected demands.	III	
.59	.58	72.	I am in community or church groups requiring continual altering of plans to meet the requests of these groups.		III
-.50	-.49	86.	I need to know schedules of other family members only when they affect my schedule.		I
.49	.49	79.	I know the daily schedules of each other family member.	I	
.46	.46	78.	I am willing to collect money door-to-door for a worthy cause.		
-.38	-.38	62.	I always find some good reason for refusing to collect money door-to-door.	III	
.35	.34	4.	Good routines the children learn at home will be helpful to them later in life.	I	
.32	.32	10.	The family tithes to the church.	I	

^aSee Table 1.

loading on this factor describe the respondent's, rather than her family's, planning behavior. The morphogenic statements loaded positively, the morphostatic statements negatively except for numbers 86, 79, 4, and 10. An explanation for numbers 79, 4, and 10 might be that they reflect the importance of some knowledge of what can be counted on rather than the rigidity conceptualized when they were chosen as morphostatic statements. Comrey's rule would exclude numbers 4 and 10 from factor interpretation. Child's rule would make reliability of number 10 questionable. It is possible that this factor reflects a belief about supporting one's community and church rather than morphostatic or morphogenic behavior, so its value as an indicator of planning behavior is questionable.

Factor V: Individual Plan Flexibility

Factor V (see Table 15) is bi-polar in that it has three sets of parallel morphostatic and morphogenic statements with opposite loadings: Numbers 69 (positive MS) and 85 (negative MG), numbers 74 (positive MS) and 73 (negative MG), and numbers 84 (positive MS) and 63 (negative MG). High commitment to the structure of the plan is illustrated by the above loadings. Adjustment to an event described in numbers 69 and 85 results in reduced meeting of demands. A positive loading on number 67 and a negative loading on number 40 suggest inflexible standards and sequencing. High factor scores on this factor would seem to indicate morphostatic planning behavior.

Factor VI: Resource Maximization

The highest loading statements on Factor VI of Table 16 indicate democratic planning and encouragement of creativity and resourcefulness. Tallman (1970) suggests that when input from all competent family members is considered for decision making, more efficient results occur. Numbers 59 and 29 indicate input from all family members. Four statements imply foresight about the effect of today's behavior on the future level of resources. The negative loading on number 70 and the positive loading on number 64 could mean that the respondent recognizes keeping active in the labor force as an investment in human capital or as personal fulfillment or both. Numbers 5 and 46 could also be interpreted as illustrating the importance of maintaining an important family resource. These statements on housing maintenance were designed to illustrate demands to which one was committed that cause adjustments to be needed. Number 5 implies that a way is found to meet this demand rather than suffering loss of well-being from a poorly maintained house. Number 46 implies some loss of well-being, and its negative loading here is consistent with the loadings on other statements in Factor VI.

Positive loadings on numbers 58 and 51 and a negative loading on number 14 illustrate encouragement of creativity. Number 8 was designed as a morphostatic statement to parallel the morphogenic statement that reads "Plans are made with the idea that more can be accomplished if higher aims are set." Its positive loading on Factor VI indicates that it was probably not interpreted by respondents as intended.

TABLE 15

ITEM AND LOADINGS FOR FACTOR V: INDIVIDUAL PLAN
FLEXIBILITY (BI-POLAR - MS)

Loadings		Item Number	Hypothesized ^a Dimension	
Pat- tern	Struc- ture		MS	MG
.56	.55	69. If I get up 15 minutes late one day, family members are likely to be late to school or work.	IV	
.54	.53	74. Having my plans interrupted is very disturbing.	II	
-.52	-.51	73. If my schedule is disrupted, it is fairly easy to make a new one.		II
.48	.47	84. If I have a plan, it keeps me from taking on new demands that might conflict with present goals.	II	
-.48	-.48	85. If I get up 15 minutes late one day, routines can be adjusted so that family members will not be late to school and work.		IV
-.47	-.46	40. The household routine can be easily changed to fit around unexpected opportunities and emergencies.		I
.42	.41	67. Whenever the children do jobs around the house, I redo them if they do not meet my expectations.	I	
-.34	-.34	63. If I have a plan, I feel free to change it to take care of new demands.		II

^aSee Table 1.

TABLE 16

ITEMS AND LOADINGS FOR FACTOR VI: RESOURCE MAXIMIZATION (MG)

Loadings		Item Number	Item	Hypothesized ^a Dimension	
Pat- tern	Struc- ture			MS	MG
.54	.53	59.	Planning for spending money is shared by family members.		I
.54	.52	29.	Decisions about whether we can spend money for some item not in the budget are made jointly by all family members concerned.		I
.52	.51	58.	The children are learning to be creative in reaching goals that might at first seem impossible.		III
-.48	-.47	14.	When money is scarce and time and skill are limited, it is difficult to think of ways to accomplish new goals.	III	
.36	.35	5.	Housing maintenance is done on a regular basis to avoid major repairs.		IV
.36	.36	8.	We accomplish more goals if we check the means available for getting them before deciding what we want.	III	
-.35	-.34	46.	Housing maintenance (repair) is delayed as long as possible because of time or money costs.	IV	
.34	.33	52.	There are other means of accomplishing goals when time and money are limited.		III
-.34	-.33	70.	If I were a mother of pre-schoolers considering returning to work in the future, there would be no extra time for part-time work or refresher courses.	II	
.32	.31	64.	If I were a mother of preschoolers, I would make time for working part-time and taking refresher courses in case I should return to work full-time in the future.		II

^aSee Table 1.

Factor VII: Family Adherence to Rules

Loadings on Factor VII (see Table 17) strongly suggest adherence to externally imposed standards and inability to adjust to increased demands without equivalent increases in the resources commonly used for meeting those demands. Statement 71 is difficult to interpret since its negative loading merely indicates that the described behavior is not likely used. It could be considered a bi-polar factor with high positive factor scores indicating morphostatic behavior in relation to rules.

Factor VIII: Individual Flexibility or Individual Coping

Factor VIII (see Table 18) includes statements that reflect the lack of rigid expectations and inhibiting forces as influencers in planning related behaviors of boundary maintenance, standard setting, and adjusting plans. Numbers 83 and 80, with positive loadings, were designed to illustrate flexibility in standards. Their parallel morphostatic statements, numbers 68 and 61, were designed to illustrate rigidity of standards. Numbers 86 and 79 were believed to suggest independence of family members versus control of one member by another. Number 82 represents low restriction on demands permitted to cross the management system boundary, and Number 25 implies that goals rather than limited resources are alternative generators. Although number 24 was designed to reflect relinquishing of goals to adjust to events, a positive loading here could imply flexibility in vacation standards or sequence. Or, the entire factor could illustrate a coping behavior on the part of the family -- particularly the respondent -- in settling for less than is desired. If this is the case, usefulness of Factor VIII in measuring morphostatic or morphogenic behavior is doubtful.

Relationships of factor scores and demographic and satisfaction variables

Two exploratory questions were proposed to be investigated if meaningful factors emerged. The maximum possible correlation between linear combinations of two sets of measurements (respondents' factor scores on the eight factors in the left set and demographic and satisfaction variables in the right set) was obtained through the use of canonical correlation. The correlation matrix for these 14 variables appears in Appendix E. The variables with the numbers assigned to each in the correlation matrix are as follows:

Factor Score Variables

1. Factor I: Morphostatic Planning Behavior -- Highly Money Related
2. Factor II: Morphogenic Planning Behavior -- Highly Money Related
3. Factor III: Family Coping with Demands
4. Factor IV: Community Commitment (MG)

TABLE 17

ITEMS AND LOADINGS FOR FACTOR VII: FAMILY ADHERENCE
TO RULES (BI-POLAR - MS)

Loadings		Item Number	Item	Hypothesized ^a Dimensions	
Pat- tern	Struc- ture			MS	MG
.61	.59	44.	We try to keep spending for food, housing, clothing, etc. close to the average for families in our income group.	I	
.54	.53	43.	We try to keep the outside of our home looking like our neighbors expect it to look.	I	
-.52	-.50	32.	The way the outside of our home looks does not depend on what the neighbors think.		I
.43	.41	36.	Adjusting to the rapid rise in cost of living is possible only if we get a pay increase.	II	
-.42	-.41	9.	It is okay if our food, housing and clothing costs are quite different from the average for families of the same income.		I
.38	.37	45.	Parents evaluate all purchases grade school children want to make before letting them have the money.	I	
.35	.34	57.	There seems to be no way to have all the things we used to get with inflation as rampant as it is.	II	
-.31	-.30	71.	When I have too much to do in one day or week, I delay or delete some task.	IV	

^aSee Table 1.

TABLE 18

ITEMS AND LOADINGS FOR FACTOR VIII: INDIVIDUAL
FLEXIBILITY (BI-POLAR - MG) OR INDIVIDUAL COPING WITH DEMANDS

Loadings		Item Number	Item	Hypothesized ^a Dimensions	
Pat- tern	Struc- ture			MS	MG
.52	.51	83.	If I cannot find a particular item I want in the stores, I can usually find a good substitute.		I
-.45	-.45	61.	I generally choose brands of products that are "tried and true" rather than unfamiliar brands.	I	
.43	.42	80.	I frequently buy new brands of products.		I
-.40	-.39	68.	If I want a particular item that I cannot find in the stores, I come home emptyhanded.	I	
.35	.34	82.	I do not let presently owned items restrict my choice of color, style, etc. of new things I buy.		III
.35	.33	24.	If the refrigerator breaks and no other money is readily available, the savings for a vacation would be used for the refrigerator instead.	IV	
.32	.31	25.	A special effort is made, if necessary, to fit special foods into the food budget and the time available for company meals.		IV
.32	.30	86.	I need to know schedules of other family members only when they affect my schedule.		I
-.30	-.30	79.	I know the daily schedules of each other family member.	I	

^aSee Table 1.

5. Factor V: Individual Plan Flexibility (MS)
6. Factor VI: Resource Maximization (MG)
7. Factor VII: Family Adherence to Rules (MS)
8. Factor VIII: Individual Flexibility (MG) or Coping

Demographic and Satisfaction Variables

9. Education Level of Respondent
10. Employment Status of Respondent
11. Number of Children at Home
12. Family Income in 1974
13. Satisfaction
14. Stage in the Family Life Cycle

All demographic and satisfaction variables except education level and employment status of respondent were coded from lower to higher or less to more. Therefore, in the interpretation given below, signs were changed for those two variables in the canonical variates where they appear. Tatsuoka (1971, p. 190) indicates that the rule for interpretation of canonical variates is like those for principal components, i.e., the relative magnitude and signs of the several combining weights defining a variate is examined for meaningfulness.

In Table 19, the chi-square values for the total set and with successive roots removed are shown. The chi-square for the total and with the first three roots removed indicate there are significant relationships among the two sets of variables.

TABLE 19

CHI-SQUARE TESTS OF THE CANONICAL VARIATES WITH SUCCESSIVE ROOTS REMOVED

Roots Removed	Canonical R-Squared	Degrees of Freedom	Chi-Square
0	.249	48	136.54***
1	.092	35	66.83**
2	.072	24	43.46**
3	.058	15	25.21*
4	.039	8	10.59
5	.004	3	0.94

*p = .05

**p = .01

***p = .001

The first four factors resulting from the canonical correlation contain the significantly related variables (see Table 19). Forty-eight per cent of the variance in factor scores was explained by the variance in the demographic and satisfaction value variances in the first four canonical factors.

The first canonical variate was significant at the .001 level (see Table 19). As family income and education of the respondent increased and with progressive stages in the family life cycle, factor scores on Factors VII, III, and IV decreased (see Table 20). Reported planning behavior shows less likelihood of 1) emphasis on rules, 2) coping type actions to meet demands, and 3) commitment to the community. As was mentioned earlier, Factors III and IV are not expected to contribute much to describing morphostatic and morphogenic planning behavior.

TABLE 20
FACTOR STRUCTURE FOR THE FIRST CANONICAL VARIATE
(Loadings $-.30 \leq .30$)

Factor Scores			Demographic and Satisfaction Values	
Factor #,	Name,	Loading	Variable	Loading
Positive			Income	.70
			Education-Respondent	.68
			Stage in Life Cycle	.42
Negative	VII: Rules	-.77		
	III: Family Coping	-.49		
	IV: Community (MG)	-.35		

From the factor structure for the second canonical variate, it can be seen that as income increases and employment level of the respondent decreases, in earlier stages of the family life cycle, planning behavior is likely to be less flexible, less community oriented and less morphogenic in money related activities (see Table 21). The chi-square for this factor was significant at the .01 level (see Table 19).

TABLE 21

FACTOR STRUCTURE FOR THE SECOND CANONICAL VARIATE
(Loadings $-.30 \leq .30$)

Factor Scores			Demographic and Satisfaction values	
Factor #,	Name,	Loading	Variable	Loading
Positive			Income	.36
	VIII: Individual Flexi-		Employment-respondent	-.93
	bility (MG)		Stage in Life Cycle	-.31
	or Coping	-.62		
	IV: Community (MG)	-.34		
Negative	II: Money-Related (MG)	-.32		

For the third canonical variate, the relationships among variables and factors were more complex. As number of children, education of the respondent, and satisfaction increased and income decreased, factor scores indicated more family coping behavior, greater personal flexibility, more morphostatic money-related behavior, and less community commitment (see Table 22). The chi-square value for this variate was significant at the .01 level (see Table 19).

TABLE 22

FACTOR STRUCTURE FOR THE THIRD CANONICAL VARIATE
(Loadings $-.30 \leq .30$)

Factor Scores			Demographic and Satisfaction values	
Factor #,	Name,	Loading	Variable	Loading
Positive	III: Coping	.44	No. of Children	.68
	VIII: Individual Flexi-		Education-respondent	.35
	bility or Coping	.37	Satisfaction	.34
	I: Money-related (MS)	.35		
Negative	IV: Community (MG)	-.61	Income	-.33

High values on the combination of demographic variables loading on this factor might lead to morphostatic planning behavior (Factors I and IV) in relation to money and time in order to maintain a basic management system structure with relatively low income and relatively heavy demands associated with family size. This is the only canonical variate in which reported level of satisfaction had a high loading, and it seems to be positively related to reported morphostatic and non-morphogenic planning behavior when combined with the demographic variables that load on this factor. Factor VIII could be interpreted here as using flexibility as a coping mechanism.

The fourth canonical variate correlated advancement in family life cycle, increase in number of children, and decrease in the respondent's highest education level positively with the factors of adherence to rules and individual flexibility (perhaps a form of coping) and negatively with family coping behavior and resource maximizing (see Table 23).

TABLE 23
FACTOR STRUCTURE FOR THE FOURTH CANONICAL VARIATE
(Loadings $-.30 \leq .30$)

	Factor Score			Demographic and Satisfaction values	
	Factor #	Name	Loading	Variable	Loading
Positive	VII:	Rules (MS)	.37	Stage in Life Cycle	.73
	VIII:	Individual Flexibility or Coping	.31	Number of Children	.54
Negative	III:	Family Coping	-.61	Education-Respondent	-.61
	VI:	Resource Maximizing (MG)	-.59		

The chi-square value for this variate was significant at the .05 level (see Table 19).

Summary

Characteristics identified in the literature for morphostatic and morphogenic management systems are presented in Tables 1 and 2 with 86 statements generated to illustrate them in the present study. Responses to the 86 statements were factor analyzed. Eight rotated factors explained almost 33 per cent of the total variance in responses to the 86 statements. The statements having high loadings on these

factors illustrated all of the general categories of characteristics hypothesized for morphostatic and morphogenic management systems. The proposed categories of bi-polar dimensions were: standard setting and sequencing (rigid to flexible), commitment to current system structure (high to low), boundary maintenance (closed to open), and adjustment to new demands (deviation correcting to deviation amplifying).

The two strongest factors were both money-related; the first had high loading morphostatic statements, and the second had high loading morphogenic statements. The literature suggested that morphostatic and morphogenic behavior could be placed on a continuum. The findings in this study support the idea of possible factors underlying planning behavior that have morphostatic and morphogenic dimensions described in the literature. However, they do not support the idea of a uni-dimensional continuum that was hypothesized by some writers. A uni-dimensional continuum would have resulted in one factor with positive loadings for statements representing either morphostatic or morphogenic planning behavior and negative loadings for statements representing the other end of the continuum.

High factor scores for Factors V and VII seem to indicate dimensions of morphostatic planning behavior. High scores on Factor VI might indicate a dimension of morphogenic planning behavior. These factors also include statements describing a variety of situations. They are different from Factors I and II in that they each relate to a specific concepts in relation to planning as indicated by their tentative names.

High scores on Factor IV would seem to mean morphogenic planning behavior, but its emphasis is almost entirely community and church related leading to a suspicion that it might measure commitment to community and church rather than openness of system boundary. Factor VIII at first seemed to reflect flexible standards, but its placement in the canonical correlations of factor scores and demographic and satisfaction variables indicates that it, like Factor III, might be described as coping with demands given limited resources. Therefore, the items loading on Factors VI, VIII, and III would have questionable usefulness in refining the test.

Instead of four bi-polar dimensions, factor-dimensions emerged along unexpected lines. Each factor judged to be useful in measuring degree of morphostasis or morphogenesis (Factors I, II, V, VI, and VII) had high loading statements from at least three of the proposed categories of dimensions. Factors I and II were not bi-polar although eight statements loading on Factor I were the proposed morphostatic statements to parallel eight of the morphogenic statements loading on Factor II. Factors V, VI, and VII had some characteristics of bi-polar factors; some parallel statements loaded oppositely on each of these factors, but there were also some statements loading on each factor without their parallel statements. The way in which factors emerged indicates that planners behave in a particular way according to the resource of emphasis or the motivation for acting or the perception of their situation. For example, Factor V, named Individual Plan

Flexibility, illustrates three of the four dimensions that are also found in the money related Factor II. An explanation of the separation of these factors could be the resource of emphasis: money in Factor 2 and time in Factor V. Similarly, Factor IV, named Community Commitment might have emerged separately from other morphogenic factors because of a specific motivation for acting (obligation to community) rather than a morphogenic orientation. High loadings on all of the factors except Factor III could reflect either morphostatic or morphogenic planning behavior as they were described by the statements in Table 2. The emergence of Factor III, which combined positive and negative loadings on both morphostatic and morphogenic statements, indicates that planners combine morphostatic and morphogenic behavior when money appears too limited to meet demands generally met by using money.

Factor scores for the 252 respondents on each of the eight rotated factors were canonically correlated with education of the respondent, employment status of the homemaker, family income, number of children at home, stage of the family life cycle, and satisfaction level reported by the respondents. The first four canonical variates were significant based on a chi-square test. The highest possible correlation between linear combinations of the two sets of variables indicated that as income and education of the respondent increased and stage of family life cycle advanced, less adherence to rules, less family coping behavior, and less community commitment behavior could be expected. Adherence to rules was the only one of these factors judged to be useful in discriminating between morphostatic and morphogenic planning behavior. Canonical variate number two gave the morphogenic money-related factor and two other factors judged to be of questionable use in discriminating a positive correlation with employment status of the homemaker and stage in the life cycle and a negative correlation with income level. The money-related morphostatic factor was the only useful one with a high loading on canonical variate three. It was in a position with three other factors to be positively correlated with number of children, education of the respondent, and reported satisfaction level and negatively correlated with income. On the fourth canonical variate, adherence to rules was positively correlated with education of the respondent. Resource maximizing factor was correlated with these demographic variables in the opposite manner.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

The purpose of the study was to develop and test an instrument designed to measure morphostatic and morphogenic planning related behavior in families. The problem was approached from a systems point of view using as a base the model proposed by Maloch and Deacon (1966) and refined by Deacon and Firebaugh (1975, p. 53). Dimensions of morphostatic and morphogenic behavior of social systems as found in the literature are given in Table 1, and statements illustrating these dimensions in planning behavior are given in Table 2. These dimensions represent planning related behavior at several points in the management system: at the boundary, in the setting of standards and sequencing of tasks, in the processes necessary for adjusting to changed inputs and in the feedback loop.

The data were collected in Spring, 1975, from 252 female homemakers who responded to the statements in a five point Likert-type test. Principal components analysis was used to determine whether or not factor-dimensions would emerge to support two substantive hypotheses concerning the characteristics of morphostatic and morphogenic planning found in the literature. Two exploratory questions concerning relationships between factor scores and demographic characteristics and satisfaction were investigated with canonical correlations.

Five of the eight rotated factors were considered useful for future refinement of a measure of morphostatic and morphogenic planning behavior in families. The first two factors were tentatively named Morphostatic Planning Behavior - Highly Money Related and Morphogenic Planning Behavior - Highly Money Related. Each of these factors contained statements representing planning related behavior at each point in the management system where the proposed dimensions were believed to differentiate between morphostatic and morphogenic planning behavior. Although the majority of the statements loading on the first two factors concerned money related situations, they were considered general in nature since the types of situations varied widely and some implied substitution of other resources for money. Factors V, VI, and VII were considered to be specific factors that might also be useful in discriminating levels of morphostatic and morphogenic planning behavior at two or more points in the management system. Factors III, IV, and VIII were of questionable usefulness in relation to the hypothesized dimensions.

It may be concluded from this study that morphostatic and morphogenic planning behaviors probably are multidimensional in nature, and

all dimensions are not bi-polar. The findings suggest that planning behavior can be described by identifying relative weights of factor scores on what appears to be morphostatic dimensions and morphogenic dimensions and that differences in planning related behavior occur at certain points in the management system. In Chapter III a summary of the relationship of this study to the Maloch and Deacon model of home management systems and to general systems concepts was given. Statements illustrating planning behavior at the points in the management system emphasized in the summary loaded on the eight factors in the following manner:

Boundary Maintenance statements loaded on

- Factor I: Morphostatic Planning Behavior - Highly Money Related
- Factor II: Morphogenic Planning Behavior - Highly Money Related
- Factor III: Family Coping with Demands
- Factor IV: Community Commitment
- Factor VI: Resource Maximization
- Factor VIII: Individual Flexibility or Coping

Standard Setting and Sequencing Statements loaded on

- Factor I: Morphostatic Planning Behavior - Highly Money Related
- Factor II: Morphogenic Planning Behavior - Highly Money Related
- Factor IV: Community Commitment
- Factor V: Individual Plan Flexibility
- Factor VI: Resource Maximization
- Factor VII: Family Adherence to Rules
- Factor VIII: Individual Flexibility or Coping

Statements Illustrating Adjustment to Changed Demands and Feedback loaded on

- Factor I: Morphostatic Planning Behavior - Highly Money Related
- Factor II: Morphogenic Planning Behavior - Highly Money Related
- Factor III: Family Coping with Demands
- Factor V: Individual Plan Flexibility
- Factor VI: Resource Maximization
- Factor VII: Family Adherence to Rules
- Factor VIII: Individual Flexibility or Coping

Statements Illustrating Commitment to Current System Structure
loaded on

- Factor I: Morphostatic Planning Behavior - Highly Money Related
- Factor II: Morphogenic Planning Behavior - Highly Money Related
- Factor III: Family Coping with Demands
- Factor V: Individual Plan Flexibility
- Factor VI: Resource Maximization
- Factor VII: Family Adherence to Rules

Other methods of identifying morphostatic and morphogenic planning behavior should be used for future development of a measurement instrument. In depth interviews and participation/observation in families could yield descriptions of planning behavior which, with the statements loading on the five useful factors in this study, could be combined into an instrument for further testing. In order to investigate the relationship between planning style and family well-being, such a refined measure could be used with families identified (or identifying themselves) as high or low on achieving goals and meeting obligations. A correlation between planning style scores and a measure of goal attainment could then be obtained.

The refined measure should also be tested for validity against some other measures whose validity has been accepted. Rokeach's (1960) Dogmatism test and Harvey and Hoffmeister's Conceptual Systems Test (1966, 1971) both propose to measure openness and closedness of thinking and have been tested for reliability and validity.

The relationship of the demographic variables to the factor scores was investigated by canonical correlation. The canonical variates that emerged helped to clarify the meaning of some factors, but the effect (if any) of some variables on planning style needs further investigation. For example, income is negatively correlated with coping factors in the first three canonical variates, but it is positively correlated with community commitment in one of them and negatively correlated with community commitment in the other two. When canonical correlation using factor scores generated by the BMD common factor analysis was done, the factor score variable for community commitment did not load highly on any of the canonical variates (factors). Income is negatively correlated with the morphostatic money related factor as shown in Table 22, and with the morphogenic money related factor as shown in Table 21. The effect of the loadings of other variables and factors on these variates must, of course, be recognized. Likewise, the relationship of education of the respondent with the factors is confusing. If a test to discriminate between morphostatic and morphogenic planning behavior can be validated, the relationship of the scores on it and these demographic variables should be further investigated.

The results of the canonical correlations raise some questions that should be investigated. Is it likely that families change their

behavior from morphostatic to morphogenic or vice versa as stage in the family life cycle progresses? Does the demand-resource relationship affect whether families act morphogenically or morphostatically?

Implications

The results of the factor analysis indicate that the Maloch and Deacon (1966) systems model is useful when testing the dimensions of management behavior. The emerging factors considered to be useful in relation to morphostatic and morphogenic planning related behavior may serve as constructs for continuing to study the throughput processes in the family management system. If a valid measure to discriminate between morphostatic and morphogenic planning behavior is developed, it could be used in many ways to investigate the management behavior of families and provide information for persons giving assistance to them. Some of the uses could be investigation of

- a. the effect of resource level in relation to demands on morphostatic or morphogenic behavior,
- b. the categories of resource use that are likely to become fixed and those that are most easily adjusted,
- c. the relationships between degree of morphostasis or morphogenesis in planning and satisfaction,
- d. the relationship between perceptions about expected resource and demand changes and morphostatic-morphogenic behavior,
- e. the effect of the nature of environment on style of planning,
- f. the relationship of morphostatic-morphogenic behavior to place of residence, feelings of responsibility for others and for one's debts, and the demographic variables used in this study, and,
- g. the extent of changes in morphostatic-morphogenic behavior orientation and, if so, what causes change, e.g., education, change in resource-demand relationship.

This kind of information should be useful to home economists and others in choosing approaches to be used in working with families.

APPENDIX A

QUESTIONNAIRE ON GOAL EMPHASIS AND RESOURCE EMPHASIS
PLANNING SUBMITTED TO HOME MANAGEMENT EXPERTS FOR EVALUATION

August 1974

To:

From: Doris Beard

Your expert judgement is needed in the development of a measurement instrument I plan to use in gathering data for my PhD research. I would very much appreciate your opinions about the validity of the statements I have developed to show differences between goal emphasis planners and resource emphasis planners.

DIRECTIONS: Sections A & B-- Please identify the statements you believe a goal emphasis planner would choose with G in the blank, those you think a resource emphasis planner would choose with R, and those that you feel indicate neither with O. You do not need to check certainty.

Section C --Please answer in the way you believe a goal emphasis planner would. Also, place G beside considerations you consider to be goal oriented and R beside the resource oriented considerations and O beside the statements that are neutral.

Section D.-- Please write G beside the description that describes a goal oriented planner, R beside the description that describes a resource oriented planner and O if you believe a situation describes neither.

DEFINITIONS:

Goal emphasis planners are defined as those who develop a concept of how the situation ought to be and make plans about identification, use, and creation of resources always keeping the goals in mind. If goal emphasis planners are unrealistic in goal setting, goal achievement may be low increasing system tension. Goal emphasis planners may, however, be motivated to greater resourcefulness and creativity and be unlikely to let resources go unused.

Resource emphasis planners are aware of perceived available resources and set goals that most likely can be achieved if sequencing of use of those resources is well done, assuming that resources are plentiful enough to make effective management possible. These planners pare down their goals before they ever get to the management sub-system and add goals incrementally as resources increase. They may reach a higher percentage of the goals that get to the management subsystem, but satisfaction may be lower than for the goal emphasis planners. It is anticipated that resource emphasis planners tend toward external control, lower aspirations, lower overall satisfaction even if most goals are achieved, higher goal achievement because goals are based on resources available, and perceptual foresight when compared to goal emphasis planners who are expected to tend toward internal control, high aspirations, high overall satisfaction if goals are realistic, and conceptual foresight.

THANK YOU VERY MUCH FOR YOUR HELP.

D. Beard

Section A.

DIRECTIONS: In this study, we are trying to look at ways in which families make plans. We do not know whether one way of planning is better than another, so there are no right and wrong answers. Try to choose the statement in each set that BEST describes the way your family plans and indicate your choice with an (X) in the appropriate blank.

In some cases, there may be no statement in a set that exactly describes how your family plans. Therefore, you are asked to indicate how well the statement you choose fits what your family does by circling a number beside your (X). The number 5 means that the statement exactly describes your family's planning. The number 1 means that there is only slight resemblance of the statement to your family's planning, but this statement better describes your planning than does any other statement in the set. The numbers 4, 3, and 2 might better describe how well the statements fit your planning actions.

Set 1.

- 1 2 3 4 5 () We make plans to do or buy something for which we do not have the time or money by determining how we can increase our time and/or money.
- 1 2 3 4 5 () We wait until we know we have the time and money before making plans to do or buy something.

Set 2.

- 1 2 3 4 5 () Each day we sort of check to see how much time is available before planning for getting household routines done.
- 1 2 3 4 5 () We have in mind the way things should be most days at home and make plans based on this mental picture for household routines.

Set 3.

- 1 2 3 4 5 () We sometimes save for specific goals, but we mostly save so that if something comes up that we need or want, we will have the resources to get it.
- 1 2 3 4 5 () Our family saves money with goals in mind.

Set 4.

- 1 2 3 4 5 () We have been able to adjust our goals fairly easily to handle the problems of inflation.
- 1 2 3 4 5 () Our income has risen sufficiently to allow us to have the same things that we had before inflation got so bad.
- 1 2 3 4 5 () With the increase in cost of living, we have maintained our level of living by using other resources to supplement our money.
- 1 2 3 4 5 () We have been unable to make do with less without changing our goals.

Set 5.

- 1 2 3 4 5 () When we are having company for a meal, we look at the available money for food and preparation time before deciding on fancy or expensive food.
- 1 2 3 4 5 () When we are having company for a meal, we plan the menu and make a special effort if necessary to fit it into the food budget and the time available.

Set 6.

- 1 2 3 4 5 () We invite guests to our home as often as we want to in spite of the fact that our time and money are limited because we are confident that the situation will be enjoyable for all.
- 1 2 3 4 5 () We invite guests to our home less often than we would like because of time, money, and/or space limitations. (maybe other resources, too, like not enough company dishes)

Set 7.

1 2 3 4 5 () When an unusual pleasant opportunity or a request we would like to honor arises, we agree to it, confident that we can "make" the time for the added activity.

1 2 3 4 5 () We often have to say "no" to opportunities or requests in order to avoid the problems associated with overcommitting our time.

Set 8.

1 2 3 4 5 () If our children want something that we approve of (like college, business school, etc.) and we can not afford it, we encourage them to choose other goals to teach them a lesson about how to live at a level that they can afford.

1 2 3 4 5 () If our children want something that we approve of, and we cannot afford it, we find a way to get it.

Set 9.

1 2 3 4 5 () It is difficult for us to give up a goal once we have set it.

1 2 3 4 5 () To prevent having to give up goals, we check resources available before setting the goals.

Set 10.

1 2 3 4 5 () We plan with the idea that we can accomplish more if we set higher aims or goals.

1 2 3 4 5 () We check resources available before setting goals because we believe that by doing so we accomplish more than we would if we did not.

Set 11.

1 2 3 4 5 () When buying an automobile, we look around to see what the prices are before we discuss what features we want.

1 2 3 4 5 () When buying an automobile, we decide what features we would like and then go out to find the best deal.

Set 12.

1 2 3 4 5 () When we have a family project to be worked on (like house-cleaning, yard work, a week-end outing, painting the house, etc), we decide just what we would like to get done and how we would like it to be when finished and when we would like to be finished, and then we all pitch in to get the job done.

1 2 3 4 5 () When we have a family project we would like to have done, we determine the skill and time available for each family member and let that determine how much we get done in a given time and our standards for the job or project outcome.

Set 13.

1 2 3 4 5 () When money is scarce and time and skill are limited, it is difficult to think of ways to accomplish goals.

1 2 3 4 5 () We think we use some fairly unorthodox or unusual means of accomplishing goals.

Set 14.

1 2 3 4 5 () When we find that a family member has overcommitted his/her time, we delay or delete some task.

1 2 3 4 5 () When we find that a family member has overcommitted his/her time, we delegate some of his/her tasks to someone else or hire them done.

Set 15.

1 2 3 4 5 () When our wants cost more money than we have, we reduce our wants to make things balance.

1 2 3 4 5 () When our wants cost more money than we have, we try to increase income and/or get some things we want by using something else besides money.

Set 16.

1 2 3 4 5 () If we want very much something that we seem not to be able to afford, we either try to be satisfied with something that costs less or wait to purchase it until we can afford it.

1 2 3 4 5 () If we want very much something that we seem not to be able to afford, we work on thinking up ways to get it.

Set 17.

1 2 3 4 5 () If we have many goals that do not get accomplished as soon as we would like, it is because our time and money and other resources run out before we get to those goals.

1 2 3 4 5 () If we do not accomplish most of our goals, it is because we lose interest in them or because we do not try hard enough to accomplish them.

B. DIRECTIONS: Try to put yourself into the following situation. Indicate your agreement (A) or disagreement (D) with the alternative actions that Mrs. A might take by circling A or D. If you are uncertain, circle both A and D. If you circle either A or D but not both, indicate your degree of certainty about what Mrs. A should or should not do. Circle 5 if you are VERY CERTAIN. Circle 1 if you are only SLIGHTLY CERTAIN. Circle 4, 3, or 2 if you are somewhere in between in your degree of certainty.

Mr. and Mrs. A. have three children, ages 1, 3, and 5. Mr. A earns enough money for them to get along at the present time if they manage well. Mrs. A is presently a full-time homemaker but did work for a while before the children were born. In relation to her possible employment in the future she should

- A 1 2 3 4 5 forget about it altogether.
D 1 2 3 4 5
- A 1 2 3 4 5 take advantage of any opportunities to work part-time now in order
D 1 2 3 4 5 to retain her skills so that she can earn money when the family needs it.
- A 1 2 3 4 5 take advantage of any opportunities to work part-time now in order to
D 1 2 3 4 5 retain her skills so that she can fulfill her own desires for working outside the home.
- A 1 2 3 4 5 take advantage of seminars and short courses in her area of work.
B 1 2 3 4 5
- A 1 2 3 4 5 continue to pay dues and be active in job related organizations.
B 1 2 3 4 5
- A 1 2 3 4 5 continue to renew any licenses necessary for her line of work.
B 1 2 3 4 5
- A 1 2 3 4 5 delay part-time work and/or refresher courses because she doesn't
B 1 2 3 4 5 have time for these with small children.
- A 1 2 3 4 5 discontinue dues and licenses because the family cannot afford
B 1 2 3 4 5 money for that when she is not working.
- A 1 2 3 4 5 plan to work later only if they need the money.
B 1 2 3 4 5
- A 1 2 3 4 5 plan to return to work as soon as the children are all in
B 1 2 3 4 5 school if she wants to.
- A 1 2 3 4 5 consider her future potential earnings when the family considers
B 1 2 3 4 5 what long term goals to set.
- A 1 2 3 4 5 wait until she is ready to go back to work to brush up on
B 1 2 3 4 5 employment skills.
- A 1 2 3 4 5 go to work full time now if she really wants to.
B 1 2 3 4 5
- A 1 2 3 4 5 Go to work now if they have economic goals that are not being met.
B 1 2 3 4 5

C. DIRECTIONS: Suppose your family is buying life insurance for the first time or reviewing your life insurance program. The following are some things families might do. For each category, rank the order (1,2,3, etc.) in which you would consider or do each of them. Put a zero (0) beside those you would not likely so. You may add other considerations you think you would have.

1. Consideration of how much insurance to buy.

- _____ Determine how much money we have to spend on life insurance.
- _____ Figure how much and what kinds of life insurance we need and for whom.
- _____ Determine what our reasons for having life insurance are.
- _____ Call an insurance salesman and ask him to explain life insurance to us.
- _____ Follow the recommendations of the insurance agent.
- _____ Learn about the types of life insurance, the purposes and cost of each type.
- _____ Determine need for savings aspect of life insurance in case we need to borrow.

2.. Consideration of increasing present coverage.

- _____ Review reasons for buying insurance.
- _____ Check on any changes in cost of living
- _____ Check to see if we can afford more insurance
- _____ Consider any new dependents since last insurance program review
- _____ Evaluate health status of the insured person(s)
- _____ Consider whether larger policy would encourage greater savings.

3. Consideration of reducing present coverage.

- _____ Consider whether money previously used for insurance is now needed more for other things.
- _____ Evaluate earning capacity of persons presently considered dependents or beneficiaries.
- _____ Consider age of children and number still at home.
- _____ Consider whether savings aspect of life insurance is as important as it was.

D. DESCRIPTION: Two homemakers approach shopping for children's clothes in the following ways.

Homemaker A makes a list of clothes to be bought for her 8 year old daughter and her 10 year old son for school.

For Daughter
2 dresses
1 pair long pants
2 shirts
underwear

For Son
4 shirts
2 pairs long pants
underwear

They go to the marketplace without really knowing how much these items will cost.

Homemaker B also has two children with about the same needs for clothes as homemaker A's children have. She takes to the marketplace with her a certain amount of money that they have determined is the maximum they can spend for school clothes. They do not have a very good idea about how much this amount of money will buy.

Which of these families is likely to be most successful in buying school clothes?

_____ Homemaker A's family

_____ Homemaker B's family

Which one is likely to experience least disappointment?

_____ Homemaker A's family

_____ Homemaker B's family

Which one is likely to be able to make adjustments in the plan most easily?

_____ Homemaker A

_____ Homemaker B

Using words and/or phrases, describe the characteristics of each of these homemakers.

Homemaker A

Homemaker B

APPENDIX B

REVISED QUESTIONNAIRE SUBMITTED TO
HOME MANAGEMENT UNDERGRADUATE STUDENTS

DIRECTIONS: Below are sets of statements illustrating how families plan and what their beliefs are about planning. Please choose the statement in each set that most closely describes how you would plan in the given situation or your belief about planning. In some of the sets, none of the statements will fit your situation exactly, but choose the one that most closely would fit your situation. Place an X beside that statement. There are no "correct" or "incorrect" answers. Circle the number corresponding to how well the statement fits your situation.

- 1 = very much like me
- 2 = somewhat like me
- 3 = slightly like me

Set 1: We decide the kind of vacation we can afford when the time comes rather than saving up for one

If the money our family has saved is for a vacation and our refrigerator breaks, we would take the vacation anyway and figure out a way to pay for the refrigerator.

If the money our family has saved is for a vacation and our refrigerator breaks, we would change the vacation (shorten or give it up entirely or change to a less costly vacation) and use the savings to pay for the refrigerator replacement.

How much is the statement you chose in set 1 like you? 1 2 3

Set 2: We often have to say "no" to opportunities or requests in order to avoid the problems associated with overcommitting our time.

We frequently commit ourselves to opportunities or requests without realizing that we are overcommitting our time and/or money.

When an unusual pleasant opportunity or a request we would like to honor arises, we agree to it, confident that we can "make the time for it."

How much is the statement you chose in set 1 like you? 1 2 3

Set 3: If I were a wife and mother of three preschoolers considering returning to work outside the home sometime in the future, I would take advantage of any opportunities to work part-time and/or attend seminars and short courses in my area of work in order to retain my work skills.

If I were a wife and mother of three preschoolers considering returning to work outside the home sometime in the future, I would not do much planning about work until it was time for me to find a job.

If I were a wife and mother of three preschoolers considering returning to work outside the home sometime in the future, I would delay part-time work and/or refresher courses because there is no extra time for these with small children.

How much is the statement you chose in set 3 like you? 1 2 3

Set 4: In the above situation (Set 3), I would discontinue dues and licenses because the family cannot afford money for that when I am not working.

In the above situation (Set 3), I would not do much planning about work until it was time for me to find a job.

In the above situation (Set 3), I would continue to pay dues to work related organizations and renew any licenses necessary for my line of work.

How much is the statement you chose in set 4 like you? 1 2 3

Set 5: When we need to do something about life insurance, we call an insurance agent and follow his/her advice.

When we make plans for buying life insurance (or when reviewing our life insurance program), we figure our life insurance needs on the basis of our knowledge of the various kinds of life insurance and our economic needs in case a family member should die.

When we make plans for buying life insurance (or when reviewing our life insurance program), we let the amount we can afford to spend for life insurance be our guide.

How much is the statement you chose in set 5 like you? 1 2 3

Set 6: We wait until we know we have the time and money before making plans to buy something.

We buy things and then often find out that we should not have because the money was needed for something else or the money runs out before payday.

We make plans to do or buy something for which we do not have the time or money by determining how we can increase or time and/or money.

How much is the statement you chose in set 6 like you? 1 2 3

Set 7: We plan with the idea that we can accomplish more if we set higher aims or goals.

We accomplish more if we just take challenges as they come without planning ahead.

We check resources available before setting goals because we believe that by doing so we accomplish more than we would if we did not.

How much is the statement you chose in set 7 like you? 1 2 3

Set 8: When we are having company in for a meal, we look at the available money for food and preparation time before deciding on fancy or expensive food.

Our having company in for meals is generally spontaneous rather than planned in advance.

When we are having company in for a meal, we plan the menu and make a special effort, if necessary, to fit it into the food budget and the time available.

How much is the statement you chose in set 8 like you? 1 2 3

Set 9: Each day we sort of check to see how much time is available before planning for getting household routines done.

We have in mind the way things should be most days at home and make plans based on this mental picture for household routines.

We do as many household routines as time permits each day without really making a time plan.

How much is the statement you chose in set 9 like you? 1 2 3

Set 10: We just use time and money until we run out and then wait until more is available if goals are not accomplished.

When money is scarce and time and skill are limited, it is difficult to think of ways to accomplish goals.

We think we use some fairly unorthodox or unusual means of accomplishing goals.

How much is the statement you chose in set 10 like you? 1 2 3

Set 11: When we find that a family member has overcommitted his/her time, we delay or delete some task.

When we find that a family member has overcommitted his/her time, we delegate some of his/her tasks to someone else or hire them done.

We do not have a good way of dealing with overcommitment of time.

How much is the statement you chose in set 11 like you? 1 2 3

Set 12: We often find out too late that our wants have cost more than we could really afford -- after we have spent the money.

When our wants cost more money than we have, we try to increase income and/or get some things we want by using something else besides money.

When our wants cost more money than we have, we reduce our wants to make things balance.

How much is the statement you chose in set 12 like you? 1 2 3

Set 13: We often find out too late that our wants have cost more than we could really afford -- after we have spent the money.

If we want very much something that we seem not to be able to afford, we either try to be satisfied with something that costs less or wait to purchase it until we can afford it.

If we want very much something that we seem not to be able to afford, we work on thinking up ways to get it.

How much is the statement you chose in set 13 like you? 1 2 3

Set 14: We adjust our plans for use of money because new goals have to be accommodated.

Once we have established a good money plan (budget) we make an effort to carry it out without letting ourselves be tempted by additional wants.

We avoid making a budget because they never work out anyway.

How much is the statement you chose in set 14 like you? 1 2 3

Set 15: If our children want something that we approve of (like college education) and we cannot afford it, we encourage them to choose other goals to teach them a lesson about how to live at a level that they can afford.

If our children want something that we approve of, we buy it without much thought if we have the money at the time.

If our children want something that we approve of, and we cannot afford it, we find a way to get it.

How much is the statement you chose in set 15 like you? 1 2 3

Set 16: Our children will receive an allowance to cover agreed upon areas of expenditures (like personal items, clothes, school lunches, snacks) and anything else within reason that they can afford.

We parents will evaluate all the purchases our grade school children want to make before letting them have the money.

Our children will get money from us to spend entirely as they choose as long as they do not buy things we do not approve of.

How much is the statement you chose in set 16 like you? 1 2 3

Set 17: We have not been able to devise a plan to cope with the rise in the cost of living.

We can adjust to the rapid rise in cost of living only if we get an equivalent pay increase.

With the increase in cost of living, we can maintain our level of living by using other resources to supplement our money.

How much is the statement you chose in set 17 like you? 1 2 3

Set 18: We invite guests to our home as often as we want to in spite of the fact that our time and money are limited because we are confident that we can find a way to make the situation enjoyable for all.

We invite guests to our home less often than we would like because of time, money, and/or space limitations. (may other resources, too, like not enough company dishes)

We invite guests to our home for a meal when we suddenly realize we have enough food for extra people or when they just happen to drop in.

How much is the statement you chose in set 18 like you? 1 2 3

APPENDIX C

QUESTIONNAIRE USED WITH THE SAMPLE

ORAL INSTRUCTIONS GIVEN TO EACH GROUP OF RESPONDENTS

This is an anonymous questionnaire. There will be no way that anyone could connect your questionnaire with you or your family. I hope that you will be willing to answer the questionnaire and turn it in as a contribution to my study of planning behavior in families.

There are no right and wrong answers. Some statements may seem to repeat or be the opposite of others. Please responde to each statement since I am trying to find the best way of describing how people in families plan. Please check over your answers when you have finished to see that the questionnaire is complete.

Directions: Read each statement.

Mark with the pencil provided the space below the words that describe how much that statement is like your family's planning or your planning. Do not use the last two answer columns. Be sure to mark each statement.

If you have never been and never expect to be in a situation described, please mark the NOT LIKE column.

When you have finished the last page, please fold up the bottom of that sheet.

Thank you very much for your time and your willingness to participate in this study.

Questionnaire on Planning Behavior in Families

Doris Beard, Investigator
Management, Housing and Equipment Division
School of Home Economics
Ohio State University

DIRECTIONS: The statements that follow are designed to describe some ways that families plan their activities and budgets for example. As far as we know, there are no right and wrong ways of planning. However, it is helpful to know the patterns which families use for planning in order to provide assistance to them when they have problems meeting goals and other demands. Therefore, I am seeking to develop a scale which could be useful to families.

PLEASE DO THE FOLLOWING:

Read each statement. Try to put your family or yourself into the situation. Fill in the space below the words to the right which best describe how much the statement is like or unlike what your family or you would do in that situation.

NOT LIKE means this is never or not at all like what your family does.

SLIGHTLY LIKE means this is seldom or slightly like what your family does.

SOMEWHAT LIKE means this is sometimes or somewhat like what your family does.

A LOT LIKE means this is usually or a lot like what your family does.

EXACTLY LIKE means this is always or exactly like what your family does.

IT IS IMPORTANT THAT YOU MARK EVERY STATEMENT

2	4	6	8	9
4	0	0	9	1
3	1	1	1	1
2	2	2	2	2
1	3	3	3	3
0	4	4	4	4
9	5	5	5	5
8	6	6	6	6
7	7	7	7	7
6	8	8	8	8
5	9	9	9	9

25. A special effort is made, if necessary, to fit special foods into the food budget and the time available for company meals.
26. Guests would be invited for meals more often if there were not time, money, and/or space limitations.
27. Since inflation has become so rampant, it has been necessary to depend more on non-money resources to maintain our level of living.
28. If a family member lost \$10, we would adjust plans so that no family member would have to suffer much.
29. Decisions about whether we can spend money for some item not in the budget are made jointly by all family members concerned.
30. We frequently "borrow" money from a fund set aside for food, taxes, etc. to buy things not in the budget.
31. Lowering of standards for a good reason is not upsetting.
32. The way the outside of our home looks does not depend on what the neighbors think.
33. Plans for spending the income tax refund are made after the exact amount of the refund is known.
34. Plans are made with the idea that more can be accomplished if higher aims are set.
35. If the children want something the parents approve of but cannot afford, we find a way to get it.
36. Adjusting to the rapid rise in cost of living is possible only if we get a pay increase.
37. The money loss to the family if a family member should die is the main factor in deciding on amount of life insurance to buy.
38. When wants cost more money than is available, wants are reduced to make things balance.
39. When wants cost more money than is available, attempts are made to increase income or to use something besides money to get them.
40. The household routine can be easily changed to fit around unexpected opportunities and emergencies.
41. Most routines the children learn at home will probably change often as they go through life.
42. We often must settle for less than we expect because of emergencies, inflation, and the like.
43. We try to keep the outside of our home looking like our neighbors expect it to look.
44. We try to keep spending for food, housing, clothing, etc. close to the average for families in our income group.
45. Parents evaluate all purchases grade school children want to make before letting them have the money.
46. Housing maintenance (repair) is delayed as long as possible because of time or money costs.
47. If the refrigerator breaks and the vacation fund is the only readily available money, some way would be found to pay for both vacation and refrigerator.
48. We find time and money for guest meals as often as we want to entertain.
49. Once a good money plan (budget) is established, an effort is made to carry it out without being tempted by additional wants.

[illegible]

12	10Y	100	10	15
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
K				
L				
M				
N				
O				
P				
Q	1	1	1	1
R	2	2	2	2
S	3	3	3	3
T	4	4	4	4
U	5	5	5	5
V	6	6	6	6
W	7	7	7	7
X	8	8	8	8
Y	9	9	9	9
Z				

Not Like	1	2	3	4	5	6	7	8	9
Slightly Like	1	2	3	4	5	6	7	8	9
Somewhat Like	1	2	3	4	5	6	7	8	9
A Lot Like	1	2	3	4	5	6	7	8	9
Exactly Like	1	2	3	4	5	6	7	8	9

74. Having my plans interrupted is very disturbing.
75. When I buy something new, a strong consideration is how it fits in with what I already have.
76. When I have too much to do in one day or week, I delegate some tasks to someone else or hire someone to do them.
77. I tend to avoid becoming active in community or church groups that might make unexpected demands.
78. I am willing to collect money door-to-door for a worthy cause.
79. I know the daily schedules of each other family member.
80. I frequently buy new brands of products.
81. I am satisfied if the jobs children do around the house do not meet my expectations for myself.
82. I do not let presently owned items restrict my choice of color, style, etc. of new things I buy.
83. If I cannot find a particular item I want in the stores, I can usually find a good substitute.
84. If I have a plan, it keeps me from taking on new demands that might conflict with present goals.
85. If I get up 15 minutes late one day, routines can be adjusted so that family members will not be late to school and work.
86. I need to know schedules of other family members only when they affect my schedule.

[illegible]

Demographic and Satisfaction Information

In order to determine whether individual and family characteristics are related to planning style, I need the following information about you and your family.

- I. Please answer the following questions for yourself and your husband or wife if you are married.

	Yourself	Your Husband or Wife (circle whether husband or wife)
Present age to nearest birthday	(1)	(2)
Highest Education Level Attained	(3) (check one)	(4) (check one)
8th grade or less	a	a
1-3 years high school	b	b
Finished high school	c	c
Some college or trade school	d	d
4 year college degree	e	e
5 years or more college	f	f
Present Employment Status	(5) (check one)	(6) (check one)
Employed full-time	a	a
Employed part-time	b	b
Unemployed, seeking work	c	c
Not seeking work, not working	d	d
Occupation (write in title of occupation)	(7)	(8)

- II. Please answer the following questions about your family.

- (9) How many children do you have? _____
- (10) What are the ages of the children presently in your household? _____
- (11) What are the ages of your children who have left your household? _____
- (12) How many years have you been responsible for managing your own household? _____
- (13) How many people other than you, your husband/wife, and your children live in your home? _____
- (14) What was your total family income in 1974? (check one)
Less than \$3000	\$10,000 - \$13,999
\$3000 - \$5999	\$14,000 - \$17,999
\$6000 - \$9999	\$17,999 - \$20,999
	Over \$21,000

- (15) How satisfied families feel is affected by many things like (1) how economically secure they are, (2) how able they are to get the things they want, (3) how healthy they are, (4) how happy they are with their marriage and family life, (5) whether or not they are accomplishing personal aims, (6) satisfaction with their jobs and (7) the community and world situation.

Considering all these things and others which are important to your family, please check how satisfied or unsatisfied you believe your family is at this time.

- _____ a. Completely Unsatisfied
- _____ b. Very Unsatisfied
- _____ c. Somewhat Unsatisfied
- _____ d. Neutral (neither satisfied or unsatisfied)
- _____ e. Somewhat Satisfied
- _____ f. Very Satisfied
- _____ g. Completely Satisfied

THANK YOU FOR YOUR TIME AND HELP

APPENDIX D
CODING OF DEMOGRAPHIC AND SATISFACTION QUESTION

Age (#1 & #2)

A = 20 or under
B = 21-25
C = 26-30
D = 31-35
E = 36-40
F = 41-45
G = 46-50
H = 51-55
I = 56-60
J = 61-65
K = Over 65

Number of children (#9) and others
in household (#13) and children
at home (#10) and children away
from home (#11)

0 = none	5 = 5
1 = 1	6 = 6
2 = 2	7 = 7
3 = 3	8 = 8
4 = 4	9 = 9 or more

Education level (#3 & #4)

1 = 5 yrs. or more of college
2 = 4 yr. college degree
3 = some college or trade school
4 = finished high school
5 = 1-3 yrs. high school
6 = 8th grade or less

Age of youngest child at home
(#10-Y) and age of oldest child
at home (#10-0)

0 = Under 1 year
1 = 1-2 years
2 = 3-4 years
3 = 5-6 years
4 = 7-9 years
5 = 10-12 years
6 = 13-15 years
7 = 16-18 years
8 = 19-22 years
9 = over 22 years

Employment status (#5 & #6)

0 = employed full-time
1 = employed part-time
2 = unemployed, seeking work
3 = not seeking work, not working

Occupation (#7 & #)

Using Hollingshead's categories,
1 = highest category
7 = lowest category

In addition,
8 = homemaker
9 = student

Age of youngest child away from
home (#11-Y) and age of oldest
child away from home (#11-0)

0 = Under 16 years old
1 = 16-18
2 = 19-20
3 = 21-22
4 = 23-30
5 = Over 30

Number of years responsible
for managing own household (#12)

A = Less than 1
B = 1-2
C = 3-5
D = 6-10
E = 11-15
F = 16-20
G = 21-25
H = 26-30
I = 31-35
J = 36-40
K = Over 40

Responses to Statements

0 = Not like
1 = Slightly like
2 = Somewhat like
3 = A lot like
4 = Exactly like

1974 income (#14)

0 = Less than \$3000
1 = \$ 3,000 - \$ 5,999
2 = \$ 6,000 - \$ 9,999
3 = \$10,000 - \$13,999
4 = \$14,000 - \$17,999
5 = \$18,000 - \$20,999
6 = Over \$21,000

Satisfaction (#15).

0 = completely satisfied
1 = very unsatisfied
2 = somewhat unsatisfied
3 = neutral (neither satisfied
nor unsatisfied)
4 = somewhat satisfied
5 = very satisfied
6 = completely satisfied

APPENDIX E
CORRELATION MATRICES

1160 d. 6. 5 7 8 9

00.

D.C.

[illegible]

[illegible][illegible]

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CORRELATION MATRIX FOR CANONICAL CORRELATIONS

	Row	1	2	3	4	5	6	7
Factor I:	1	1.000	0.621	0.336	0.076	0.113	0.187	-0.116
Factor II:	2	0.621	1.000	0.368	-0.001	0.207	0.212	-0.046
Factor III:	3	0.336	0.368	1.000	-0.077	0.203	0.045	0.190
Factor IV:	4	0.076	-0.001	-0.077	1.000	0.044	0.036	0.041
Factor V:	5	0.113	0.207	0.203	0.044	1.000	-0.099	0.256
Factor VI:	6	0.187	0.212	0.045	0.036	-0.099	1.000	-0.364
Factor VII:	7	-0.116	-0.046	0.190	0.041	0.256	-0.364	1.000
Factor VIII:	8	0.210	0.342	-0.066	-0.021	0.102	0.189	-0.080
Education	9	-0.008	-0.068	0.036	0.172	0.091	-0.134	0.333
Employment	10	0.076	-0.109	-0.025	-0.077	-0.073	-0.073	0.052
Children	11	0.051	0.034	-0.008	-0.100	0.066	-0.127	0.012
Income	12	-0.040	0.010	-0.247	-0.108	-0.083	0.113	-0.229
Satisfaction	13	0.052	0.058	0.049	-0.135	0.112	0.067	0.043
Stage	14	-0.051	0.065	-0.183	-0.065	-0.053	-0.052	-0.099

		8	9	10	11	12	13	14
Factor I:	1	0.210	-0.008	0.076	0.051	-0.040	0.052	-0.051
Factor II:	2	0.342	-0.068	-0.109	0.034	0.010	0.058	0.065
Factor III:	3	-0.066	0.036	-0.025	-0.008	-0.247	0.049	-0.183
Factor IV:	4	-0.021	0.172	-0.077	-0.100	-0.108	-0.135	-0.065
Factor V:	5	0.102	0.091	-0.073	0.066	-0.083	0.112	-0.053
Factor VI:	6	0.189	-0.134	-0.073	-0.127	0.113	0.067	-0.052
Factor VII:	7	-0.080	0.333	0.052	0.012	-0.229	0.043	-0.099
Factor VIII:	8	1.000	0.005	-0.169	0.120	-0.068	0.013	0.130
Education	9	0.005	1.000	0.034	0.144	-0.205	-0.081	0.080
Employment	10	-0.169	0.034	1.000	-0.007	0.118	-0.031	-0.155
Children	11	0.120	0.144	-0.007	1.000	-0.003	0.018	0.278
Income	12	0.068	-0.205	0.118	-0.003	1.000	0.138	0.031
Satisfaction	13	0.013	-0.081	-0.031	0.018	0.138	1.000	-0.081
Stage	14	0.130	0.080	-0.155	0.278	0.031	-0.081	1.000

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