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FAMILY SYSTEM PROPERTIES

By

Anita Miller Covert

A DISSERTATION

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

DOCTOR OF PHILOSOPHY

Department of Family and Child Ecology

1989

ABSTRACT

FAMILY SYSTEM PROPERTIES

By

Anita Miller Covert

Using an interpretive philosophy of social science and a family systems perspective, a schema for clarifying family properties is developed. Family properties are shown to vary on the continuum of stable/dynamic and on the continuum of concrete/abstract. Because of the high cost of studying family system process variables using an interpretive science approach, the relationship between the degree of family congruency and the nature of the family property being studied is examined in hope of finding some family properties which can be studied using less expensive survey methods.

Data used were from a state-wide survey of early adolescents and their parents. Youths were interviewed in their homes and parents responded to a questionnaire. Subjects were selected using a stratified multi-stage cluster sampling technique.

The relative levels of family congruency of three stable-concrete variables, income, urbanicity, and family

activities and three dynamic-abstract variables, stress level, family relationship, and communication were examined. Given a high level of family congruency on a variable, data about that variable could be obtained less expensively by surveying one family member.

Statistically significant levels of incongruency were found for all family properties. However, the levels of incongruency were more than twice as high for the three dynamic-abstract variables, stress level, family relationship, and communication than for two of the stable-concrete variables, income and urbanicity. The other stable-concrete variable, family activities, had incongruency levels similar to the dynamic-abstract variables.

ACKNOWLEDGMENTS

There are many persons who have guided, supported, and assisted in the completion of this degree. I would like to give special thanks and appreciation to the following:

To Joanne Keith, Dennis Keefe and Frank Boster, committee members whose assistance, critique, and support are much appreciated.

To Margaret Bubolz, chairperson of my doctoral committee, whose encouragement and guidance allowed me to improve the quality of my work.

To my partners and staff, Janet, Scott, Ann, Joyce, Stacy, Vickie, Sue and everyone at Country Stitches and Country Additions who supported, encouraged, and compensated to enable me to complete this degree.

To my husband Mahlon without whose total support none of this would have been possible.

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CHAPTER I: INTRODUCTION

"Through time and in all places, the family has been and continues to be the central and basic educational, social, and economic unit. It is our most elemental group, for it is here that individuals interact more frequently, more intimately, and over a longer period of time. The family is regarded as the principal setting in which individual personality and the values, skills, and discipline required for effectively functioning in the larger society are shaped." (B. Paolucci, from an address, "Values and Family Ecology," at Kent State University in 1973).

Paolucci's statement identifies the importance of the family unit and the processes of that unit. However, family phenomena are especially elusive and multifaceted (Miller, Rollins, and Thomas, 1982). Many topics in the family area have been considered personal and private and, therefore, not suitable for study. Although more and more research is being done on the family, there are many questions about which research approaches should be taken.

This dissertation addresses theoretical and methodological issues concerning the study of the family. First, using an interpretive philosophy of science and a family systems perspective, a schema for clarifying family properties is developed. Second, the dissertation examines the relationship between the degree of family congruency and the nature of the family property being studied. This

has methodological implications for the unit of analysis used in family research. Specifically, these questions are asked: Can one family member provide family data or should data be collected from more than one family member? Does the answer to this question differ based on the type of family property data being collected?

These questions are addressed by developing the background for the schema, then analyzing a specific research problem. In Chapter 2, the three perspectives or philosophies of science, positivistic science, interpretive science, and critical science are discussed and critiqued. Next, basic assumptions used in this dissertation and the research implications arising from these are stated and discussed. Chapter 3 outlines the human ecological approach as the conceptual framework and discusses the family systems perspective. This is followed by a discussion of the study of the family system. These discussions provide the background for integration of interpretive science with the family systems perspective. Chapter 3 also examines and presents an organizational schema for family properties. Research questions regarding family congruency on different family properties are identified and subsequently studied. Literature relevant to the focus of the dissertation is incorporated in Chapters 2 and 3.

Chapter 4 identifies the methodology used for this study, while Chapter 5 reports and analyzes the results and summarizes the contributions made by this dissertation

through relating the findings to an interpretive philosophy of science perspective and an ecological and family systems approach.

CHAPTER II: PHILOSOPHY OF SCIENCE PERSPECTIVES

Since Hobbes declared human behavior to be a legitimate object of scientific knowledge and began constructing a science of politics (McCarthy, 1978), there has been debate concerning the philosophy of social science. Although there is general agreement that the purpose of science is "to give an organized account of the universe--to connect, to fit together in relations of subsumption, the statements embodying the knowledge that has been acquired" (Rudner, 1966, p. 2), there is considerable debate on how that should be done. Habermas has identified three major philosophies of science, i.e. perspectives on how human behavior should be studied, positivistic, interpretive, and critical (Brown, 1984). Habermas developed a continuum of rationality for the three perspectives in which he identified technical, hermeneutic, and emancipatory rationality. These three perspectives have also been labeled positivistic/technical, interpretive/hermeneutic, and critical/emancipatory. Following is a discussion and critique of these perspectives outlining the presuppositions and evaluating each as a method of scientific study, and specifically evaluating the use of each in family science.

Positivistic Science

Technical rationality and positivistic thinking have dominated the social sciences (Giddens, 1977). Jurich (1987, p. 4) states that "evidence of a positivist orientation pervades much of the scholarly endeavors in family studies." According to the positivist framework, the world is conceived as having a reality that is completely independent of the observer and, further, that information about this objective world is adequate and all that is needed by scientists (Geuss, 1981). While we cannot deal with all the fragments within positivism, the most widely accepted basic presuppositions of positivistic science include:

1. The objects of study are static, i.e. humans cannot change on their own (Pratt, 1978).
2. The relationship between knowledge and practice is linear (Pratt, 1978; Rudner, 1966).
3. The major interest is to predict and control the environment. Change can be brought about by learning the causes and changing them (Keats and Urry, 1975; Pratt, 1978; Rudner, 1966; Schutz, 1963).
4. The scientist is an objective observer. All research is replicable and verifiable i.e. if something cannot be observed, then it does not exist (Lindley, Fellows, & Macdonald, 1978; Brown, 1984).
5. Self concept is formed by success or failure at controlling the environment (Brown, 1984).

The positivist believes that science should confine itself to the data of experience and reject all transcendent metaphysical and abstract speculation (Beck, 1979). Scientific theories consist of sets of highly general universal statements, whose truth or falsity can be assessed by means of systematic observation and verification (Keat and Urry, 1975). The results of these observations and experiments can be known either with total certainty, or at least with a far greater degree of certainty than anything else. Social phenomena as well as natural should be explained by scientific laws not by ends, final causes, or transcendent grounds (Beck, 1979). The main effort of positivists is to look empirically at human behavior in order to isolate basic human needs and methods humans have for relating to each other. Values may be studied empirically as obedience to law (Beck, 1979), but an empiricist would not attempt to study values as causes for actions.

According to Keat and Urry (1975), the main difficulty for the positivist account of scientific explanation arises from the existence of logical arguments which enable us only to predict and not to explain the occurrence of particular events. Watters (1985, p.109) pointed out that "all that is achieved is an answer as to whether or not some delineated piece of behavior does or does not support already held ideas." The positivist takes a small number of behaviors and tests the relationship among them. The reasons for their occurrence are not considered nor are the

other system or environmental factors which may affect these behaviors considered.

During the middle of the seventeenth century, Hobbes outlined a program that took human behavior as the material for a science of man, society, and the state. Social scientists have since been searching for a correct understanding of the laws of human nature, which would enable the establishment of all the conditions for a proper ordering of human life (McCarthy, 1978). They have not been successful in finding the general covering laws of human nature that would allow the scientist to predict behavior a majority of the time. Humankind and their environments are too complex for a simple causal model. This fragmented science is unable to provide answers in a society that calls for integrative thinking (Checkland, 1976).

While positivists would argue that the role of the scientist is to describe and predict human behavior, others would criticize positivism for not being evaluative. Keats and Urry (1975) criticized positivism by stating that since positivism is not critical, it supports the status quo. Osmund (1987) suggests that positivism serves to justify the status quo in society. Since positivistic science does not state what should be and then evaluate society against that, it is in effect supporting the existing society. For example, these theorists would argue that by only describing the role of the man in the household as holding

the most power, the positivist is perpetuating that role for men.

In applying positivistic science to the study of the family from an ecosystems perspective, these criticisms become clear. Positivistic science takes a very narrow look at the family in that it examines a very limited number of variables at a time. It does not consider all of the environments and their interactions with the family. In addition, technical rationality does not account for the interaction of the family as a system. This will be further discussed in the section on the family system. Positivistic science has not developed a comprehensive theory which integrates all of its fragmented propositions regarding the family into a major complex theory. Technical rationality also fails to do more than describe the family. It offers no criticism nor guidance.

Interpretive Science

Interpretive science, based on hermeneutic rationality, has the goal of communicating and arriving at inter-subjective understanding of one another (Bubolz, 1988). While the approach is not new, e.g., symbolic interaction is based on this perspective, a limited amount of family research has been conducted using this perspective. The basic presuppositions of interpretive science include:

1. The interest is one of understanding other human beings with whom we interact and come to mutual agreement on

the norms of conduct (Bleicher, 1980). Social rules are formed which are used by society to determine what performance is appropriate in the particular situation (Brown, 1985).

2. People learn through the reflective process of seeking rational intersubjective agreement. People are the active users of language. They have the capacity to be reflective and self-determining (Brown, 1985). People seek true consensus on the basis of the most rationally compelling argument (Bertalanffy, 1968).
3. Self-concept is formed by relating to others.
4. Social life is governed by intersubjectively produced, understood, and agreed-upon norms, values, meanings, and rules which shape interaction (Brown, 1984).
5. The relationship between knowledge and action is not linear, i.e. knowledge is both acquired and used (Brown, 1984).

The interpretive scientist believes that humans create a culture based on language and formation of concepts. Physical trial-and-error, which is largely characteristic of animal behavior, is replaced by mental experimentation which allows goal directedness to become possible (Bertalanffy, 1968). Through interaction people come to consensus as to what is reality. To the interpretivist the major emphasis of study should be on people's perceptions of reality in order to find causal explanations (Keat and Urry, 1975). Explanatory understanding involves knowledge

of the motives which bear directly on the action performed (Keat and Urry, 1975). While the positivist observes behavior and makes inferences based on logic, the interpretivist asks the participants the meaning of the behavior or asks them their perception of the environment and thus draws inferences directly from the participants.

Bleicher (1980) criticized this perspective because of the subjectivity of the researcher. He suggested that the prejudices held by the interpreter play an important part in the findings, since there are no criteria for judging the correctness or truth of proffered interpretations.

However, interpretive science seems especially well suited for use in the study of the family since the members of the family create meanings and social order of their own. Because it asks the envired unit to interpret events that occur, it fits well with the ecological perspective. By identifying specific constructs of study for each environment, researcher subjectivity should be eliminated. It is the interpretation by the family members that is to be studied. Additionally, interaction and goal directedness are components of interpretive science which also reflect components of the ecological approach. This concept is further developed in the section on family systems.

Critical Science

Critical science, based on emancipative rationality in the Frankfurt tradition, has a goal of "freeing individuals

and groups from repression, opposition, irrationalities and false consciousness" (Bubolz, 1988, p.1). Sprey, (1988) suggests that Giddens clarifies radical critical theory by asking the question "what types of social change are feasible and desirable, and how should we strive to achieve them?" (p. 884). One of the current uses of a critical science approach has been in the feminist movement where gender inequality has been investigated and societal norms and ideologies criticized (Osmund, 1987). Basic presuppositions of critical science, based on Habermas, include:

1. People have been influenced by ideologies which have been developed by political groups in order to keep people from thinking and disagreeing with these repressive forces. People could have perfect agreement if they could escape the ideologies that society has taught them (McCarthy, 1978).
2. Given "free speech" or a "perfect speech situation" true consensus could be achieved because the logic would be clear to all (McCarthy, 1978). If people could freely communicate with each other, they would come to consensus regarding social order.
3. The view that interpretive understanding could be the sole methodological basis of social inquiry is inadequate (McCarthy, 1978). An adequate social methodology would have to integrate interpretive understanding with critique of ideology. Habermas

called for the establishment of criteria by which the ideological world can evaluate social life (Jurich, 1987).

4. Those who are educated, thinking people must evaluate society and "rise up" against corruption. It is their moral duty to fight the system (Keats and Urry, 1975) and reconstruct capitalist society (McCarthy, 1978).

The critical scientist believes, just as the interpretivist believes, that humans create a culture based on language and formation of concepts. The beliefs and concepts serve as social rules (Brown, 1985). Human beings are capable of revising their beliefs. However, the critical scientist also believes that there are authoritarian pressures in society which shape beliefs and actions (Brown, 1985). Acting according to these pressures causes the individual to act in ways which are contrary to the actions of the individual given free choice. The critical scientist is obligated to criticize society and seek a more democratic social order (Brown, 1985).

There are some logical inconsistencies in Habermas' argument. First, there are no "perfect speech situations" as Habermas identified them since everyone exists in society and has been influenced by that society. Therefore, it is impossible for people to reach consensus. In spite of striving for a perfect speech situation, the corruption of society makes it unattainable. Second, even given a "perfect speech situation" where people have not been corrupted by ideologies, Habermas does not account for

psychological differences among people. He does not account for internal forces such as greed, lust, pride. He assumes a linear-causal world as the positivist does and consequently, has the same theoretical problems as the positivist (Keats and Urry, 1975). Since he believes that without corruption all people will agree, then it must follow that all people are the same and follow behavioral law with no free choice. Third, in his argument that people create reality through consensus, Habermas ignored the natural environment. While it may be granted that much of people's realities are created through interaction, there is also a natural reality and physical conditions that do exist. There is a natural order that man does not create. Fourth, if, as Habermas argued, people are corrupted by society's ideologies, then the educated, thinking people are also corrupted, at least to a certain extent. How can these corrupt people judge the corruption of society? How can we ever escape society's influence?

Other writers (Bubolz, 1984; Paolucci and Bubolz, 1980; Watters, 1984; Brown, 1984; and Osmond, 1981) have taken a more moderate approach to critical theory. They have advocated a critical approach to research which evaluates the conditions, beliefs, and actions which influence the status of the family. They assert that the theorist/researcher has an obligation to be aware of her/his own ideological positions and beliefs and how they can influence observation and interpretation of events and processes. For example, they have suggested that a

researcher should not only describe the woman in the abusive family which is what a positivist would do, but the critical scientist should also critique that situation as well as understand why it exists. This critique is based on society's value system and the researcher's beliefs regarding human rights and obligations.

However, this researcher sees the need for a separation between the theorist/researcher and the moral evaluator. She does not believe that it is the role of the researcher to evaluate society, since there are no clear criteria for scientists to use in order to critique the family. Instead, the researcher's role is to study what processes are operating in society, e.g. in families, and what are the results of these processes. The researcher is a reporter of events. There is a need to study the prevalent patterns occurring in society or families and the factors correlated with these patterns. Then this information should be communicated to and discussed with other families and moral leaders, so they can make informed decisions regarding changing families and society in agreed upon directions. In other words, the family scientist needs to search for family system processes, inform families about these processes so they can choose to use a process that will enable them to meet their goals. The roles of researcher and moral evaluator need to be separated.

In addition, it can be argued that there is insufficient knowledge available for use as a basis for

these judgments. It is not known how a family operates. It is not known which processes lead to which results. Some specifics are known, e.g. family violence is destructive to individual egos. But it is not known what processes lead to family violence; which family processes can be utilized to change family violence; nor exactly which processes are utilized in the destruction of the individual ego. A moral value could, perhaps, be established, e.g. equality in the family, and then show that inequality exists within the family. However, it is not known which processes or family properties to change to create equality. In summary, it is not known (1) what processes are operating in family systems; (2) what causes these processes to operate as they are; and (3) how to change these processes to obtain certain results.

Philosophy of Science Perspectives Used in this Dissertation

Based on the previous discussion and critique of existing perspectives, the basic philosophy of science assumptions used in this dissertation will be stated and how they relate to the philosophy of interpretive science will be discussed.

Basic Assumptions Used in this Dissertation

1. **Humans act rather than merely respond.** Humans are agents outside the system of nature since they possess a generative mechanism (Cushman, 1977). Individuals can and do make purposive choice decisions among alternatives (Fay 1975). Humans are not passive recipients of information but active users of language and thought (Brown, 1984). Humans have the capacity to be reflective and self-determining. They are capable of anticipating the actions of others based on their relationship with the other person and based on their past experiences with similar situations. They are also capable of evaluating outcomes and making adaptations in future encounters. In addition, humans are also capable of self-reflection (Brown, 1984).

Self-reflection is a basic presupposition of interpretive theory. The interpretive scientist believes that people change their views of the world and their

behavior based on their reflection of their interaction with society.

2. People are interdependent in coordination situations.

In order to survive in society, behavior has to be coordinated through the use of communication (Cushman, 1977). Held (1980) suggests that people exist in society, and therefore, are forced to create intersubjectively produced, understood, and agreed-upon norms, values, meanings, and rules which shape interaction.

Similarly, interpretive scientists state that social life is governed by agreed-upon norms, values, meanings and rules (Brown, 1984). This agreement is achieved through communication.

3. People impose order on their worlds in order to deal with them (Cushman, 1977).

Although universal laws of behavior do not exist, people are capable of creating regularity out of chaos. This order consists of rules, norms, and patterns of behavior. This order can be divided into sociocultural and personal. Sociocultural norms are established by the culture and groups to which the individual belongs. The culture establishes norms for behavior through economic, political, and social factors. In addition, various groups also establish norms for the behavior of their group members. For example, religious groups usually have formalized norms of behavior.

Sociocultural norms for behavior are transmitted through communication (Habermas in Watters, 1985). In other words, a sociocultural world is formed in addition to the natural

environment by interacting with others to establish agreement on the norms of conduct by which people are to live. Personal patterns and habits are guided by the person's values and meanings much of which the person has derived from cultural and sociological norms. When there is a conflict among the norms of the various groups to which the person belongs, the individual's values determine which norms are followed. The person's choices are also influenced by the natural environment and the level of technology existing in the culture. Shimanoff (1980, p. 23) states, "The major distinction that can be made between laws and rule-related descriptions is that relationships are determined in laws and prescribed by rules."

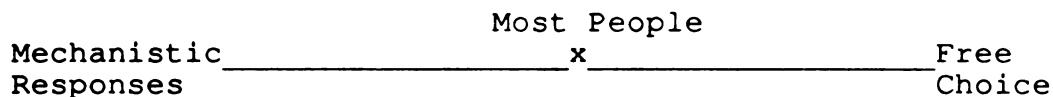


Figure 1. Individual choice continuum.

Figure 1 illustrates the continuum of individual choice of humans. As is illustrated, humans are not mechanically forced to follow certain laws of behavior. Mechanistic responses are virtually stimulus responses. Neither are humans operating in society allowed complete free choice. Free choice is constrained by the necessity of coordination and constrained by social institutions. In order to function in society, people have to follow certain norms. In addition, people repeat certain behaviors until

they form a pattern, in order to simplify their complex world. In certain circumstances, they tend to follow a specific pattern. Behavior is not deterministic, but probablistic since actors may choose to violate norms or rules.

This reflects the interpretive scientist's belief that society is governed by norms and rules (Brown, 1984). However, to the interpretivist, the major emphasis of study should be on people's perceptions of reality. The major emphasis of study by this researcher is the search for common norms, rules, and processes used by families to relate to each other and interact with the rest of society.

Research Implications

Based on the underlying framework, assumptions and literature, certain research implications can be drawn. First, Fay (1975) suggests that one task of the interpretive social scientist is to discover the set of rules which underlies behavior. Given choice-governed behaviors, location of regularities would appear to be a futile endeavor. However, Cushman (1977) suggests that there are commonalities among the patterns people use which are empirically persistent and verifiable. Both sociological-cultural norms, family system processes, and personal patterns can be studied. These norms, processes, and patterns are discovered empirically by observation of behaviors (Brown, 1984; Keat and Urry, 1975).

Bleicher (1980) suggests, "Access to other human beings is possible only by indirect means: what we experience initially are gestures, sounds, and actions and only in the process of understanding do we take the step from external signs to the underlying inner life, the psychological existence of the Other" (p.158). Second, then, the social scientist needs to study these norms and patterns.

Specifically, the family scientist needs to study the behaviors of the family which represent the processes operating in the family system. Unfortunately, it is difficult and expensive to study family processes. Hence, individuals within the family are now commonly studied or form the units of analysis, and family processes and properties are constructed or inferred from individual data.

CHAPTER III: CONCEPTUAL FRAMEWORK: THE ECOLOGICAL APPROACH

The conceptual framework of this study is based upon a family ecological systems approach. This reflects the belief that the family and its immediate environment form a complex, dynamic, living system (Melson, 1980). Bronfenbrenner (1979) points out the impossibility of understanding human behavior solely from the objective properties of an environment without reference to its meaning for the people in the setting. Family members are not only linked by patterns of reciprocal influence but also in a network of physical and social environments (Herrin & Wright, 1988). Humans are a part of the total life system and must be considered as a part of the environment that surrounds them (Bubolz & Whiren, 1984). A family ecosystem has three central organizing concepts: the enviroined unit (the family), its environment, and the patterning of interactions and transactions between them (Andrews, Bubolz, Paolucci, 1980). This study will examine the family system as the enviroined unit.

The Family As a System

A family organizes itself in and with its environment and develops ways of comprehending, seeing, hearing, understanding, and knowing its environment (Reuben and Kim, 1975). "Families do not merely reflect the larger culture and social structure; they create meanings and relationships and individualities" (Handel, 1967, p.2). As a consequence of this process, no two families will view the objects or people in their environments in the same way. What the family becomes is therefore a function of having organized itself in particular ways with the objects and people in its milieu. Gagnon and Greenblat (1978) suggest that because of the way in which a family organizes itself, it may be said to have a culture, a corporate identity, that the individuals in the family seek to maintain. A family behaves as a whole not as an aggregate (Ackerman, 1984).

The family is not merely the sum of the individuals who reside in it. It is a system of interaction larger than the separate desires or activities of the constituent individuals (Gagnon and Greenblat, 1978). The whole of the system is greater than the sum of its parts. The parts of the system are less important than the connectedness of the parts (Fisher, 1980). The family as a whole is radically different from the sum of its parts (Ackerman, 1984). The family system is holistic and nonsummative.

Families demonstrate equifinality (Galvin and Bromel, 1982). For example, several families may have a theme of "we will help those in need" and each may work toward their goal of living out such a theme differently, e.g. by gathering food for needy families, giving money to aid overseas organizations, or by volunteering for the Peace Corps. In addition to arguing that the same consequent does not always result from similar antecedent conditions, Fisher also argues that similar antecedent conditions do not always lead to the same consequent, therefore we have multifinality (Rubin and Kim, 1972). Equifinality and multifinality exist because the whole of the family system is holistic and nonsummative.

In addition, the family system consists of interdependent parts. Each member of the family affects and is affected by the other members of the family just as with other types of systems (Miller, 1978). Handel (1967, p.6) states, "Intrafamilial relationships are interlocking and contingent upon one another. The relationship of husband and wife both affects and is affected by the relationship of each to each child". As Schucts and Hicks (1981) state "the family is viewed as an interacting group of individuals who are emotionally, physically, and psychologically interdependent" (p.6). Paolucci, Hall, and Axinn (1977) suggest that "one fundamental characteristic of the family ecosystem is that it is made up of a collectivity of interdependent but independent parts working together to achieve a common purpose" (p.13).

Belsky, Lerner, and Spanier (1984) state "Children and their families reciprocally influence each other. Neither a child nor a family is a static entity. ...The structure of the family changes when additional children are added to it and when older children leave home"(p.74).

This study focuses on one of the organizing concepts of the human ecosystem, the family system and tangentially refers to a second organizing concept, patterning of interactions and transactions between them. However, it is still necessary to identify and briefly discuss the third concept, environment. Generally, the environment can further be divided into three sub-environments: the natural physical-biological environment, the human behavioral or social-cultural environment, and the human built environment (Bubolz, et al, 1979). The family system is affected by and affects its environments. The natural environment provides the family system with resources to meet needs and attain goals. The social-cultural environment can include the social and political systems with which the family system interacts and provides both resources and constraints for the family system. The human built environment provides the physical setting in which the family system operates.

Study of the Family System

The interdependency of the family members precludes using a linear-causal model to study the family. The family system is not a simple causal chain (Ackerman, 1984,

p.20). In addition, equifinality and multifinality preclude studying the family using a model which examines one variable and predicts how the manipulation of the variable (or a series of variables) affects other variables. Rather, the family needs to be examined from a systems perspective which allows for mutual causal models and reciprocal casual models, for causation is multiple and reciprocal (Fisher in Ruben and Kim, 1975).

While this perspective allows the study of a complex system, it also demands that the study be of all parts of the complex system. With the complexity of the family system, many variables simultaneously mutually affect the system, so it is impossible to isolate the variables. Even if it were possible to isolate individual variables, they would act differently in isolation because of the absence of the interaction effect which normally exists in a system. For example, let us examine marital quality with the independent variable of amount of self-disclosure. Lewis and Spanier (1979) in their review of the marital quality literature state the following proposition "The more the self-disclosure between the spouses, the greater the marital quality" (p.282). Fitzpatrick, Fallis, and Vance (1982), on the other hand, state that based on their research "Individuals in intimate relationships seek an equilibrium point between the need to be open in their relationships and the need to protect the mate or family member from the consequences of such openness. From this perspective, communication in ongoing relationships may be

said to require a constant balance between hiding and revelation" (p. 61). Instead of the linear causal relationship proposed by Lewis and Spanier, Fitzpatrick et al. (1982) discuss a curvilinear relationship. There appears to be an interaction effect between the amount of self-disclosure and the nature of the relationship. One might also propose that there would also be an interaction effect for the amount of self-disclosure, the nature of the relationship, the value the couple gives to openness of the relationship, the longevity of the relationship, and the nature of the self-disclosure. The researcher would also have to be concerned with the problem of incongruency between the partners. One partner may perceive self-disclosure as more threatening than the other partner. The partners may be very different in their assessment of the quality of their marriage. Linear-causal relationships and static, unidirectional variables do not adequately describe a family system (Handel, 1967).

In addition, families need to be studied in terms of their interaction rather than in terms of the intrinsic characteristics of individual family members (Schucts and Hicks, 1981). The unit of study should be the family as a whole rather than the individual. Kantor and Lehr (1975) proposed that each family should be studied in its entirety rather than in terms of its separate parts. Interpersonal behavior and relationships i.e. interacts or family processes rather than individual behavior or psychological traits, should be studied.

According to von Bertalanffy, a system is 'entities standing in interaction.' This means that any group of entities constitutes a system if change in behavior of an entity is a function of the sum of the behavior of all other entities. Certainly, families exhibit what have been called constitutive characteristics, rather than summative characteristics. This means that the group varies with its components' relationships rather than with numbers. When a child is born to a couple, it is a brand new group, not the same group with an addition. When a parent is lost (or a child), the same is true. A family is distinguished by its parts together with their relationships, and it behaves as a whole, not as an aggregate. (Ackerman, 1984, p.16)

Since the family is a system, the need then is to study the family as a system. "It is not possible to get systems answers unless we ask systems questions".

(Broderick and Smith in Burr et al., 1979, p. 128).

Schucts and Hicks (1981) state that the systems perspective "offers the richest potential for the future study of families" (p. 18). Holman and Burr addressed this issue in Decade Review (1980), "Some scholars have suggested that systems theory may be the wave of the future, providing generalizations useful for understanding not only family systems, but other systems as well" (p. 10).

In order to study the family system, (1) the unit of analysis needs to be the family not the individual; and (2) dynamic processes need to be studied, rather than static variables. If the family is a system, if the family system is greater than the sum of the individuals, and if there is an interdependency among the family members, the family, not the individuals, must be the unit of analysis. Variables must be studied which represent family system

properties, not intrinsic characteristics of individual psychological traits that make the family unique, but the way in which the unique individuals mesh that make the family system.

It was a large step forward in family research when Handel (1967) and others began to question how families could be studied without data from all the family members. They recognized, for example, that family power could not be studied by asking the mother in the family about the family's power distribution. They recognized that the nature of the data collected depends on who serves as the informant and there is a need for multiple perspectives (Klein, 1984). The 1982 special issue of Journal of Marriage and the Family entitled "Methodology : the Other Side of Caring," contained a special section of articles on the measurement of relationships. Every article asserted that a family cannot be represented accurately by measurements obtained from one member (Walters, Pittman, and Norrell, 1984).

Since large discrepancies occur when data are collected from various family members, the problem of handling these discrepant reports arises. In a special session on the measurement of families at the Theory and Research Pre-Conference of the 1984 National Council of Family Relations, several suggestions were made for analyzing data collected from more than one family member. Schumm et al. (1984) suggested that a covariance-based scoring technique would be a useful technique. Walters et

al. (1984) suggested a complex formula for combining the family members' scores which includes individual scores, individual variance, and family variance. Klein suggested several models for combining family members' scores. Ezell, Paolucci, and Bubolz (1984) tested several of these methods of combining scores. But the problem with all of these suggestions is that they are still combining individual scores. If the family system is greater than the sum of the individuals, then researchers should not be summing individual family member scores to arrive at a family score. In his critique of Walters et al., White (1984) states "the aggregation of individual scores to create family scores undermines the premise that the family is not just the sum of its parts because such aggregation is, indeed, just a technique for summing the parts" (p. 515).

As Dell states, "clear systemic thinking forbids talking of one aspect of the system as separate from and causally acting upon other parts of the system" (1982, p. 23). It is necessary to find systemic, holistic properties which represent the family as a whole, not just the cumulation of the individuals, because the family whole transcends the cumulation of the individuals.

Family System Studies

Three sets of researchers have done studies which come close to the types of holistic family studies that have been suggested in this paper.

Kantor and Lehr (1975) developed a relational typology based on a cybernetic model which views the information processed by the family as distance regulation information (The Distance Regulation Model). They suggest that families evolve particular patterns of interactional activity through the various ways in which they utilize, access and target dimensions. The access dimensions of space, time, and energy describe the physical aspects of family's experience. The target dimensions of affect, power, and meaning describe and include the conceptual aspects of the family's experience. Kantor and Lehr proposed three types of relationships in their model: open, closed, and random, based on the access dimensions utilized by given families to gain particular targets which they value.

Kantor and Lehr sent observers into the homes of clinical and non-clinical families to observe over a period of time. In this way the family systems were observed in the natural setting with most of the interacting components present. This is a great advancement over almost all other studies, but Kantor and Lehr still seem to look at the individuals. For example, they list the player roles, and then suggest the impact of each role on the family system. They use a systems framework but study the impact of individual behavior.

Although Kantor and Lehr's work has generated much discussion, it has generated little research. In fact, studies demonstrate that Kantor and Lehr's dimensions may

not be confirmed through factor analysis (Buerkel-Rothfuss and Yerby, 1981).

Reiss (1981) believes that each family is guided in its transactions with the world by its family paradigm which acts as a central organizer of its shared constructs, sets expectations, and fantasizes about its social world. This is described as The Consensual Experience Model. His research showed that families can be distinguished by the differences in their paradigms. Reiss identified three characteristics which he found helpful in distinguishing among families. First, families differ in the belief that the world is ordered and that its mysteries are discoverable through reasoned search. Second, families differ in their openness to the world and the extent to which they view their family as a unitary group. Third, families differ in their experience of novelty in their world. Reiss had families work on puzzles in a laboratory situation. He then examined the different ways in which the families related to each other and handled the puzzles. While this research does include the whole family and examines them in a holistic manner, the laboratory situation does not parallel real life. It is hard to know how generalizable the findings of this research are to real life.

The Circumplex Model of Marital and Family Systems (Olson and McCubbin, 1983) focuses on three salient dimensions of family dynamics-adaptability, cohesion, and communication. The model enables the researchers to

classify families into types; the primary ones are Balanced, Mid-Range, and Extreme. A paper and pencil instrument, FACES II, is administered to husbands, wives, and adolescent family members. Scores are combined in a variety of ways to arrive at Couple Scores and Family Scores. Olson and McCubbin report that the level of husband and wife agreement was rather low, ranging from correlations of .46 and .32. Several studies have generally supported the model (Olson and McCubbin, 1983).

Of the models currently being used as the basis of research the Circumplex Model adheres most closely to the criteria set out in this paper. Certainly, cohesion, adaptability, and communication are family system variables. They represent the family rather than the individual and they are dynamic process variables. The problem with the use of this model is the aggregation of individual data. Although these researchers try to use a variety of methods for combining the data, they are still using a cumulative score for the family score rather than observing the family as a whole and assigning a family score based on the whole family.

Constantine (1983) has developed a family typology, the Unified Process Theory which he believes incorporates the other major family typologies including Olson's Circumplex Model, and Reiss's Consensual Experience Model, and Kantor and Lehr's Distance Regulation Model. Constantine (1988) argues that while his typology resembles some of these other theoretical models, his differs in that

"this framework does not reflect statistically revealed common factors in particular data sets or represent the characteristics of particular measuring devices or techniques" (p. 284). He suggests that this typology is "merely a conceptual device, a classification of ways of thinking about families..." (1988, p. 284). Constantine's theory does not add significantly to family theory. He has not added anything of importance to Olson's Circumplex Model with which parts of the Unified Process Theory are isomorphic. In addition, by lacking an empirical base, this model lacks grounding in reality.

The next section will explore family properties and set-up a schema for organizing family properties as a part of the search for the systemic, holistic properties for which Dell calls.

Family Properties

Family properties are attributes which can be used to characterize the family as a whole. These distinguishing traits belong to the family as a whole since they describe the family system. These qualities are phenomena which are not considered to belong to individual family members. Reiss, Oliveri, and Curd (1983) suggest that each family has a set of core assumptions, convictions, or beliefs that it holds about its environment; these assumptions guide the family to sample certain segments of its world and ignore others. These family properties cause each family system to function differently from other family systems.

These family properties can be used as constructs with the family as the unit of analysis.

Stable and Dynamic Properties

Family properties can be arranged on a continuum varying from those which remain relatively stable or static for long periods of time to those which are dynamic and frequently redefined. Stable properties are often discrete variables such as sex. They are variables which remain stable for years at a time e.g. family membership. When stable properties do change, they usually change in discrete intervals. They do not shift on a continuum. Even environmental factors remain stable for long periods of time with a crisis changing them upon rare occasions. Family income remains stable relative to other families unless unemployed members become employed or the family experiences an economic setback. Then family income is changed greatly, but again stabilizes for a period of time. The family culture, e.g. family values and themes, generally remains stable or changes slowly.

Dynamic family properties are those which change and evolve because of the interaction process of the family system. Family members negotiate and change these system properties. Cohesion, adaptability, communication, and the family image are modified as the family system adapts to a changing environment and to changing members as they go through the life stages. Family systems differ in the rate at which these properties change. Burr and Lowe (1987)

suggest that adaptability, cohesion, and communication are not outcomes or goals, rather they are transformation processes or system characteristics that help families attain desired outcomes. Gagnon and Greenblat (1978) suggest that "patterns of decision making and influence tend to evolve. They are not static..."(p.113).

Dynamic properties exist on a continuum. They are not discrete variables. For example, a family is not either cohesive or separated. Each family has a level of cohesion which is made up of different levels of cohesion concerning different parts of the family system. In other words, the amount of family cohesion for each family varies from topic to topic and from time-to-time (see Figure 2).

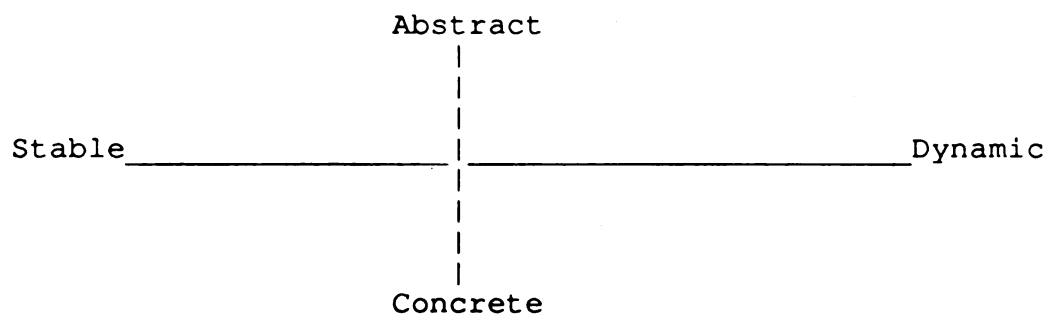


Figure 2. Continuum of family properties.

Concrete and Abstract Family Properties

In addition to family properties being either stable or dynamic, family attributes also vary from abstract to concrete. Stable family properties tend to be fairly concrete. Family membership, income, housing, etc. are concrete observable, measurable attributes. While family

beliefs, values, and themes are fairly stable they are not as observable and consequently are more abstract.

Dynamic properties tend to be more abstract. Cohesion, adaptability, boundaries etc. are not directly observable. These abstract variables have to be inferred from other observable behaviors.

Individual Family Member Attributes

There are several attributes which belong to individual family members or a sub-group in the family, but which greatly affect the family system and, which are affected by the family system. Education levels (Lipsitz, 1980a), occupation, self esteem, personality, and health of family members greatly affect the family system just as the family system affects these individual attributes. Traditionally, many of these have been identified as family variables, however, it must be noted that these are individual attributes not family system properties i.e. education level may vary significantly between spouses as is also true of health, age and other individual attributes, (see Figure 3).

Stable Concrete Properties

Several family attributes are consistent over time and observable and therefore tend to fall on the stable end of the stable/dynamic continuum and the concrete end of concrete/abstract continuum. **Family composition** remains constant over periods of time and then changes in discrete categories. Families differ based on the positions and

FAMILY PROPERTIES

Family properties are attributes which can be used to characterize the family as a whole. They are phenomena which are not considered to belong to individual family members.

STABLE PROPERTIES

Stable properties are either discrete variables such as sex or variables which remain stable for periods of time. They are not in the process of being modified and changed. When stable properties do change, they usually change in discrete intervals--they do not shift on a continuum.

Stable Concrete Properties

Family Membership
Environmental Factors

Stable Abstract Properties

Family Culture

DYNAMIC PROPERTIES

Dynamic properties are constantly evolving because of the interaction process of the family system. Due to the dynamic nature of these properties, they are more abstract, and, therefore, there is no category for Dynamic Concrete Properties.

Dynamic Abstract Properties

Family Structure
Cohesion
Adaptability
Communication
Family Image

INDIVIDUAL FAMILY MEMBER ATTRIBUTES THAT AFFECT THE FAMILY SYSTEM

These are individual properties which belong to individual family members or a sub-group in the family, but they greatly affect the family system and the family system affects these attributes.

Education level
Occupation
Self-esteem
Personality
Health

Figure 3. Description of family properties.

roles which are filled in the family. Does the family have two parents or just one? Is it a traditional family, or a blended family and does it contain extended family members? What is the marital type? Is it a first marriage, second marriage? Is it monogamous, polygynous, polyandrous? What is the family membership? How large is the family? What is its sex and age composition/distribution? Does the family contain sub-systems such as the marital couple, parent-child groups, or sibling groups?

Environmental Factors of the family system are relatively stable concrete properties. The physical availability of resources differs from family to family. Melson (1980) discusses the family-environment "fit" as the discrepancy between demands and supplies with the lower such a discrepancy, the better the fit. Standard of living or income are sometimes used as indicators of availability of resources. Galvin and Brommel (1982) suggest that this system/environmental "fit" can be extended to the fit between the style of family interaction and the environment. Congruency between the family and its housing occurs when aspects of the environment are clear expressions of the family's identity, the way the members relate and the way they see the outside world. The non-fit category applies to those homes which are unsuited to the family's pattern. Urbanicity is a family property since the surrounding territory may partially dictate how the family relates to its environment and other systems (Melson, 1980). Some neighborhoods prevent socialization

because it is too "dangerous". (Galvin and Brommel, 1982). Availability of social support systems is also an environmental family factor.

Stable Abstract Properties

One group of family system properties remains stable over time, but is abstract and must be inferred from other behaviors. **Family Culture** is the general climate of the family (Olson and McCubbin, 1983). Family beliefs, values, value based goals, and family themes are parts of the family culture. The ethnic-racial background and more specifically the family-of-origin background each spouse brings to the relationship is a significant social influence on the family culture (Galvin and Brommel, 1982).

Dynamic Abstract Properties

Dynamic properties are constantly evolving because of the interaction process of the family system. Because of the dynamic nature of these properties, they are more abstract. Therefore, we do not have properties which are dynamic concrete properties.

Family Structure is comprised of several dimensions including cohesion, and adaptability. Olson (1983) defines family cohesion as "the emotional bonding that family members have toward one another" (p. 48). Within cohesion emotional bonding, boundaries, coalitions, time, space, friends, decision making, and interests and recreation are measured. When considering boundaries, Galvin and Brommel

(1982) suggest that families create boundaries within which family members are expected to function. Handel (1967) believes each family system sets up physical and psychological boundaries for dealing with the world and these determine for family members what parts of the outside world with which it may deal. Some boundaries are permeable, or allow movement across them, and others resist much movement across them. Thus boundaries vary in openness/closedness. In addition, boundaries vary in clarity/ambiguity. Boundaries also control the linkages with other social systems.

Adaptability is "the ability of a marital or family system to change its power structure, role relationships, and relationship rules in response to situational and developmental stress" (Olson and McCubbin, 1983, p. 48). Adaptability is measured by family power, negotiation styles, role relationships, and relationship rules. Family power relates to the ability of one family member to influence the outcome she desires (Scanzoni & Szinovacz, 1980; Fitzpatrick and Badzinski, 1985; Galvin and Brommel, 1982). Fitzpatrick and Badzinski (1985) point out that it is important not only who makes a particular decision, but also who decides that this person may make those decisions and who determines who will decide which family member will make a decision.

Communication, which is another property, which falls at the dynamic and abstract ends of the continuums, may be viewed as a symbolic, transactional process, or the process

of creating and sharing meanings (Galvin and Brommel, 1982). Olson and McCubbin (1983) consider communication to be the facilitating dimension critical to cohesion and adaptability. They suggest that positive communication skills, i.e. empathy, reflective listening, and supportive comments enable families to share with each other their changing needs and preferences as they relate to cohesion and adaptability. Fitzpatrick and Buadzinski (1985) also see communication as an underlying mechanisms which produces and reproduces the social structure of the family.

Each family develops its own **Family Image** which is a third dynamic abstract property. Families vary in satisfaction, capability i.e. capable families to inept families (Beavers and Voeller, 1984), effectiveness (Burr and Lowe, 1987), resiliency (McCubbin and McCubbin, 1988), and ability to function, i.e. families that work well together (Galvin and Brommel, 1982). In addition, through its own development, each family develops its assumptions about the world in which it lives. The family paradigm serves as a central organizer of its shared constructs, and expectations about its world (Reiss, 1981). As each family builds its history and develops its paradigm, it forms an image of itself and how it differs from other families (Handel, 1967; Melson, 1980). The family is continually modifying its image.

Several family scholars have described the developmental nature of the family, how the family system moves through transitions or **Family Life Stages**, e.g. Hill

(1974), Duvall (1988), and Aldous (1978). The family begins as a childless couple, adds the first child and so on until the children leave home and the couple has no children at home again. Galvin and Brommel (1982) and others point out the need to account for families with numerous children or widely spaced children so that the family system is in several stages at the same time, i.e. simultaneous stages. The need to develop appropriate categories for divorced, remarried and step families has also been recognized (Aldous, 1978). Olson and McCubbin (1983) found that "Marital and family satisfaction was higher at early and later stages of the family life cycle when couples were living without children. Satisfaction was lowest at the Adolescent stage, when family stress was the highest" (p.39). Family life stage is not considered a family property in the schema presented here. It is an analytical device for classifying families on the basis of selected criteria such as presence and/or age of children.

Family Congruency

Family congruency is defined as the degree of agreement among the family members. Congruency and discrepancy form a continuum of agreement/disagreement. As Jesse Bernard (1972) has pointed out in discussing 'his marriage' and 'her marriage,' if you ask both spouses the same question, there is rarely high congruency in their answers. Olson and Rabunsky (1972) point out that there are substantial differences in men's and women's answers

about the length of premarital acquaintance, length of engagement, age at marriage, frequency of sexual relations, social interaction, household tasks, and decision making. Ball and McKenry (1983) suggest that a major methodological problem in family research is the heavy reliance on wives as the sole source of data.

In discussing marital power studies, Quarm (1981) reports that most studies have found large discrepancies. She reported studies that have found between-spouse correlations ranging from .15 to .86 and suggests that most correlations are low considering the fact that husbands and wives are supposed to be reporting on the same reality. Low congruency is usually explained by differences in perception of husbands and wives or ideology (Quarm, 1981). She also found that part of the lack of congruency was attributable to random measurement error and that increasing the reliability of measures can increase the correlation between spouses.

Gecas and Schwalbe (1986) found there was also little congruency between parents' reports of their behavior and their adolescent's perceptions of this behavior. Thompson, Acock, and Clark (1985) found that both mothers and fathers had limited ability to gauge the attitudes of their young adult sons and daughters. Except for "Fundamentalist Religious Beliefs" and "Sexual Permissiveness", parents did not even agree between themselves about their sons' and daughters' opinions. Additionally, other researchers have found little congruency on family life (Jessop, 1981; Hess and Torney, 1971).

Generally, low levels of congruency have been found in families. However, when congruency among family members was examined in light of the type of family property, it was found that there was higher family congruency on concrete, stable properties than on abstract, dynamic properties. There may be differences in congruency among family members depending upon the nature of family property. Olson (in Szinovacz, 1983) suggests that such a difference occurred when he advocated a clear differentiation between "behavioral" and "attitudinal" self-report data. He argued that the indicators of specific behaviors should be minimally affected by perceptual divergencies and thus result in similar responses by all family members. Attitudinal indicators can be expected to be less similar.

Concrete, Stable Properties

Cohen and Orum (1972) found high agreement on socio-economic factors. Ezell et al. (1984) in a study of 107 randomly selected families (husband, wife, oldest child) found congruent perceptions about the child's household production responsibilities. Berk and Shih (1980) in a study of 748 couples in a national study found that couples generally agreed on who did household tasks. Niemi (1974) found high congruency among parents and their son/daughter on the demographic variables of number of children in the family, father's education, mother's education, and father's occupation in a study of over 1500

college students and their parents. These family properties remain somewhat stable over long periods of time and therefore are easily and objectively measured.

Abstract, Dynamic Properties

Ezell et al. (1984) found that the triadic perceptions of quality of whole life were not congruent. Niemi (1974) in his study of college students and their parents found much lower levels of congruency on abstract, dynamic properties such as reports of other's politics, parent's relationship, student-parent closeness, and family decision making than he did on stable, concrete properties such as demographics. These family properties are evolving due to the interaction process of the family system and consequently are difficult to measure when based on the perception of one family member.

Although researchers have been encouraged for over 25 years to collect data from more than one family member, researchers continue to rely on data from one family member (Bokemier and Monroe, 1983). Most researchers do not study families but rather individuals in a family setting (Ezell et al. 1984; McDonald, 1980). In a content analysis of 80 research articles published in professional journals, Bokemier and Monroe (1983) found that 37 per cent of the authors had relied on one family member for data to be generalized to the family unit. They also suggest that one of the major reasons for the continued reliance on individual respondents is a pragmatic, convenience

rationale. Collection and analysis of data from more than one family member significantly increase the costs and complexity of a study (Szinovacz, 1983; Ezell et al. 1984). Niemi (1974) further suggests that observations and experimentation of more than one family member require a degree of cooperation not usually given to researchers. It requires more time to gather data and it is more difficult to arrange interviews with more than one family member.

Research Problem and Question

One way to minimize the cost, but yet secure the necessary data, would be to gather some data from one member of the family and other data from several members of the family. If the researcher could be assured that the data collected from the individual would accurately represent the whole family system, i.e. that there is high family congruence, then family research would be easier and less expensive. If there are differences found in family congruency depending upon the nature of the family property, then the researcher could obtain data inexpensively from one family member on highly congruent properties and use higher cost multi-family member data for low congruent properties. This concept has been supported in Quarm's (1981) work which found that acceptable measures can be developed for certain spheres of power using the responses of only spouse. For instance, if power over the wife's work status were being measured for a study of

working women, asking the husband would not add information to that of the wife.

The purpose of this study is to determine which family properties are amenable to survey research and which properties are best studied using observation. This leads to the following research question: Are there differences in the degree of congruency among family members based on the family property being studied?

CHAPTER IV: METHODOLOGY

This study is a secondary analysis of the Michigan Early Adolescent Survey (MEAS), a larger study, sponsored by the Michigan Agricultural Experiment Station, the Department of Family and child Ecology at Michigan State University and the 4H youth programs of the Michigan Cooperative Extension Service. Dr. Joanne Keith and Dr. Leah Hoopfer were directors of the study. The study was undertaken to determine the degree of congruence among mothers, fathers, and their early adolescent children on several family properties.

Although assumptions of the interpretive perspective or science were the basis of this dissertation, it was not possible to use interpretive methodology which would yield mutual understanding and intersubjective agreement on meanings of experiences, norms, rules and values. The data used were obtained through structured questionnaires and did not involve direct reciprocal communication between the researcher and the persons studied.

Hypothesized Relationship

Hypothesis: Stable, concrete family properties such as family income, urbanicity and shared family activities will have higher family congruency than dynamic, abstract family properties such as family stress level, family closeness, and communication patterns.

Sampling Procedure

A sample of 285 Michigan families was interviewed using the Michigan Early Adolescent Survey. Early adolescents, 10-to-14 years of age, chosen for this study were selected using a stratified multistage cluster approach. Using the stratifier early adolescent, population clusters were randomly assigned to counties. The three strata identified were: (1) highly urban counties; (2) counties with large cities and rural areas; (3) highly rural counties. Stratum 1 was assigned eight clusters; stratum 2 nine clusters; and stratum 3, eight clusters to represent the proportion of early adolescents in each stratum. Eighteen counties were initially selected from among Michigan's 83 counties. Two densely populated counties, Wayne and Oakland, had more interviews assigned than could possibly be conducted, consequently, substitutions were made based on similarity of demographics. Three of Wayne County's clusters were reassigned to Genessee and Jackson Counties. Since Wayne County's sample was to have been drawn from the Detroit

Public Schools, primarily a black, inner-city group, the reassigned clusters were chosen from Flint and Jackson Public Schools because their respective student bodies represented inner city populations. One cluster from Oakland County was assigned to Macomb County, again geographically and demographically most like the original county. A second problem occurred when some counties chose not to participate in the study necessitating further substitutions. Insuring sampling representative of the substrata, county substitutions were made as follows: Ingham for Washtenaw, Presque Isle for Emmett, and Marquette for Chippewa. The list of counties with their respective numbers of clusters is shown below:

Final Counties and Number of Clusters for Sample

Wayne (2)	Eaton (1)	St. Clair (1)
Oakland (2)	Lenawee (1)	Calhoun (1)
Macomb (2)	Allegan (1)	Benzie (1)
Kent (1)	Van Buren (1)	Delta (1)
Saginaw (2)	Tuscola (1)	
Ingham (1)	Marquette (1)	
Kalamazoo (1)	Presque Isle (1)	
Genessee (2)	Jackson (1)	

Within each county, the clusters were then randomly assigned to public and private school districts which had been weighted according to their student population using the official Department of Education head count record of public and private schools for the 1982-83 school year.

School districts were unable to provide information regarding the exact number of 10-14 year olds in their schools, therefore weighting was based upon the total number of students enrolled in each district. There was a possibility of bias in the selection process at this point if there were disproportionate numbers of 10 to 14 year olds in some districts. However, it would be surprising to find that one school is substantially larger in grades 5 through 8 and substantially smaller in the other grades than other schools in the state.

School districts in fourteen of twenty counties cooperated by providing student names. It was necessary to make substitutions in the six remaining counties as the school districts initially identified refused to participate in the study. In four counties, permission was secured from the next district chosen by random selection. Oakland county needed to contact four school districts before receiving permission to sample in two districts. Jackson Public Schools refused to participate so the Catholic schools in that city were substituted and sampling took place from their inner city schools. This brought the largest amount of bias into the sample, in terms of possible racial and religious difference.

At each school, lists of youths in grades 5, 6, 7, and 8 were obtained, and one boy and one girl from each grade were randomly selected. Three alternate names were chosen for each boy and girl. If the youth drawn first would not participate in the study, the next alternate name could be

contacted. Slightly over two times the number of families needed had to be contacted in order to fill the designated interview positions. The most difficult subjects to recruit into the study were the fourteen-year-old males. This sampling technique assured that all 5th through 8th grade youths in the state of Michigan had an equal probability for being selected for the study.

A total of 304 youths were selected. Only 285 were subsequently interviewed, since some counties were unable to interview sufficient respondents to fulfill their assigned number. To insure that strata were proportionately represented, weighting was used to bring each stratum up to the desired number. Stratum 1, the urban group, had the most difficulty with data collection and therefore underrepresented the youth living in urban areas. The total number of actual respondents for each stratum was identified and then divided by the target number for the stratum resulting in the number used for weighting for the particular stratum. Weights for the strata were: Stratum 1, 1.1566265; Stratum 2, 1.046729; and Stratum 3, 1.0105263.

Interview Procedure

Each family was interviewed at home by a trained interviewer. The interviewer asked the parents and youth the questions on the "Household" Questionnaire which included items such as household occupants and ethnicity. Then the interviewer interviewed the youth, and a

questionnaire was administered to each parent separately in two-parent homes and to the parent in one-parent homes. Interviewers were instructed to conduct the questioning of the adolescent at the same time as the adult family members completed the written questionnaire, but in a location separate from the adults for privacy and to insure confidentiality of the adolescent responses. The interviews dealt with several topic areas in addition to that which is presented in this study. Each interview took about an hour to complete.

Interviewers were residents of the target counties and were recruited into the study by local county 4-H staff. The interviewers, as volunteers, were prepared for their role during ten hours of training conducted by the primary research staff in February, 1983. Training involved: information dissemination on early adolescence and interviewing techniques; role playing to familiarize them with the interviewer role; and critique of video taped interviews. The interview instruments were reviewed in detail to insure that the interviewers were clear about the specific directions for each question. The MEAS study was explained in some detail so each interviewer would understand the purposes of the study and the tools that would be used in carrying out the interview process.

Interviewers were similar in age to the parents they were interviewing. Over one half were between the ages of 31 to 45. They were likely to have had some college or to be college graduates and to be employed.

Potential study families were contacted with an introductory letter to explain the survey and to request their participation. Families were instructed that an interviewer would contact them to confirm their willingness to participate in the study and to schedule an interview appointment. Most interviews were completed by June, 1983, although a few interviews were delayed until September, 1983, due to staffing shortages in local 4-H offices.

Once the study, the Michigan Early Adolescent Survey, was designed, it was submitted for approval to the University Committee on Research Involving Human Subjects. Data collection was started when approval was granted that confirmed protection of the rights of sample subjects. (See Appendix.)

Description of the Study Sample

MEAS respondents included 304 adolescents, 283 mothers and 212 fathers. Of the early adolescents who completed the survey 50.5 percent were females. Approximately three-fourths of the youths sampled were evenly split into ages eleven, twelve, and thirteen. The remaining one-fourth was evenly divided between 10 and 14 year olds. These early adolescents were distributed evenly over the 5th, 6th, 7th, and 8th grades.

Eighty-two percent of the sample was white. Sixteen percent was black. The remaining families were Mexican-American and other ethnic groups. The income of

the MEAS sample using data obtained from the mothers was very much like the Michigan census information on families with early adolescents. Thirty percent of the families in this study reported a family income of \$20,000-\$30,000. Another 30 percent reported an income of \$30,000-\$50,000. Four percent were over \$55,000. A little over 30 percent reported income under \$20,000.

Using data obtained from the mothers, 40 percent of the families lived in rural areas, another 30 percent reported living in towns of 25,000 people or less. Twenty percent lived in large cities and their suburbs.

Many more early adolescents (94.8%) lived with their natural mothers than lived with their natural fathers (75.5%). Adoptive parents made up 2 percent of the mothers and 2.5 percent of the fathers. Step-parents made up 1.2 percent of the mothers and 4.7 percent of the fathers. These proportions are very similar to the Michigan census data. The number of children in the families was as follows: one, 11 percent; two, 37 percent; three, 30 percent; four, 15 percent; five, 4 percent; six, 3 percent; and seven or more, less than 2 percent.

Over 50 percent of fathers reported having a high school education or having attended college (but not graduating). Almost one-third were college graduates and/or had attended professional school which was almost twice as many as compared to the Michigan census data. Two-thirds of the fathers were in the age group 36-50 years of age. The majority of parents, both men (91%) and women

(63%), were employed outside the home. Seventy percent of the fathers were employed by others, most of them in skilled work, professional or management positions. Ten percent of the mothers were self-employed and 50 percent reported they were employed by someone other than themselves. Thirty-three percent of the women were engaged in office work. Thirteen percent of the mothers were professional people, and 27 percent of MEAS mothers were fulltime homemakers.

Description of Variables

Family congruency was assessed using three stable, concrete family properties; i.e. income, urbanicity, and shared family activities and three dynamic abstract family properties; i.e. stress, relationship, communication pattern. No variables which could be used as indicators of stable abstract properties were available. Figure 4 identifies the properties, subjects, relevant questions and the possible responses.

Theoretical Family Property	Subjects	Question as Stated	Options
Stable Concrete			
INCOME	Parents	Please indicate the amount that comes closest to your total net family income before taxes last year (include all forms of income)	Less than \$10,000 \$10,000-20,000 \$30,000-55,000 \$55,000-75,000 Over \$75,000
URBANICITY	Parents	Where does your family live?	On a farm (40 acres or more) Rural area not a farm (<40 acres) In a small town of 5,000-25,000 In a city of 25,000-100,000 Inside the city limits of a large city over 100,000 In a suburb of a large city over 100,000
FAMILY ACTIVITIES	Parents/ Adolescent	How frequently do you do this activity? Eat evening meal together Eat breakfast together Play games with family	Every day Most days each week Once or twice a week Once or twice a week Once or twice a month Less than once a month Never

Figure 4. Overview of family properties, subjects, and survey questions.

Theoretical Family Property	Subjects	Question as Stated	Options
Dynamic Abstract			
STRESS LEVEL	Parents	Have any of the following things happened to your child in the past year?	Yes No
	Adolescent	Have any of the following things happened to you in the past year? A parent died Close family member died Serious illness in family or friend Parents separate, divorce, or remarry Parent lost job Mother went to work Birth of a brother or sister Threatened by violence Theft of personal possessions Older brother or sister left home Trouble with grandparents or other relatives Moved to another city or different part of town Received or lost a pet Trouble with teacher Started menstrual periods (girls) Changed to a new school or a teacher Grew 3-6 inches Good friend moved Experimented with drugs or alcohol Upset by gym class showers Body looks changed a lot Voice changed (boys) Started dating other sex Serious illness/hospitalization (self)	
RELATIONSHIP	Parents/ Adolescent	In general what words describe your relationship with your child (mother, father)?	Very good, very close Good, close Fair, not so close Poor, not close at all
COMMUNICATION PATTERN	Parent/ Adolescent	Who do you (your child) find it easier to talk to about each of these subjects: Schoolwork Money Friends Body changes Something you've (he/she) has done wrong Permission to go somewhere Something you're (he/she) is upset about	Neither parent Father Mother Both parents

Figure 4. (cont'd)

Income

Each parent was asked to indicate the total net family income before taxes. The options were: (1) less than \$10,000, (2) \$10,000-20,000, (3) \$20,000-30,000, (4) \$30,000-55,000, (5) \$55,000-75,000, and (6) over \$75,000. A measurement of congruency on income was formed by subtracting the father's score from the mother's score. (For example, if the mother's score equalled 3 and the father's score equalled 4, the congruency score was 1). The means, standard deviations, and the range are presented in Table 1.

Urbanicity

Each parent was asked to indicate where his/her family lived. The options were (1) on a farm (40 acres or more), (2) in a rural area but not a farm (less than 40 acres), (3) in a small town (under 5,000), (4) in a town of 5,000-25,000, (5) in a city of 25,000-100,000, (6) inside the city limits of a large city over 100,000, (7) in a suburb of a large city over 100,000. A measurement of congruency on urbanicity was formed by subtracting the father's score from the mother's score. The means, standard deviations, and the range are presented in Table 1.

Family Activities

The youth and each parent were asked separately about shared family activities. Specifically, they were asked if they eat the evening meal together, if they eat breakfast together, and if they play games together. The options were every day, most days each week, once or twice a month, less than once a month, and never. These items were combined to form a separate shared family activities index for mothers, fathers, and youths. The possible range of scores was 3 to 18. A measurement of congruency on shared family activities was formed by taking the mean of the three scores and then subtracting each individual's score

from the mean score and then summing the absolute value of these differences. (If the mother's score was 12, the father's score was 13 and the child's score was 11, the mean would be 12 and the family congruency score would be 2). The means, standard deviations, and the range for the variable are presented in Table 1.

Stress Level

Variables were created to assess the family congruency in three abstract, dynamic family properties, i.e. family stress, family closeness, and family communication patterns. The youth and each parent were asked separately about family stress events. The family stress variable was based on the assumption that the occurrence of certain events creates stress in the family. The higher the number of stress inducing events, the higher the stress level in the family. Each person was asked if the following has happened during the past year: a parent died; close family member died; serious illness of family or friend; parents separated, divorced, or remarried; parent lost job; mother went to work; birth of a brother or sister; child was threatened by violence; theft of personal possessions; older brother or sister left home; trouble with grandparents or other relatives; moved to another city or different part of town; received or lost a pet; trouble with teacher; good friend moved; experimented with drugs or alcohol; serious illness/hospitalization of youth. The options were yes, no. These items were totalled to create an index of family stress for mothers, fathers, and youths. Possible index scores ranged from 0 (no stress events) to 17 (all events occurred). A measurement of congruency on family stress was formed by taking the mean of the three scores and subtracting each individual's score from the mean score and then summing the absolute value of these differences. The means, standard deviations, and the range are presented in Table 1.

Relationship

Each parent was asked what words best describe his/her relationship with his/her child. Each youth was asked the same about his/her mother and his/her father. The options were (1) very good, very close; (2) good, close; (3) fair, not so close; and (4) poor, not close at all. To form a congruency score for family closeness, the child's score about his/her mother/father was subtracted from the mother/father's score, which gave two sets of scores, i.e. closeness for child/mother and closeness for child/father. Since the correlation for these was significant at the .0001 level, these two scores were combined. The score for the child/mother was added to the score for the child/father to form the family congruency score. A measurement of congruency on shared family activities was formed by taking the mean of the three scores and then subtracting each individual's score from the mean score and then summing the absolute value of these differences. The means, standard deviations, and the range are presented in Table 1.

Communication Pattern

The youths were asked whom they find it easiest to talk to about various topics including schoolwork, money, friends, body changes, something they have done wrong, permission to go somewhere, and something they were upset about. The options were neither parent, father, mother, both parents. The parents were asked whom their child talked to about these topics. The list of topics and the options were the same as on the youth's survey. The data were examined to determine the congruency in perceptions of communication patterns among the three family members for each topic. In order to determine whether or not there was congruence in the family member's perception of the use of communication with neither parent/both parents, scales were formed. The categories of "father only" and "mother only" were combined, consequently, the scale was (0) neither

parent, (1) one parent, (2) both parents. Each scale included all the topics. The alpha for reliability for the youth scale was .90; father scale was .99; mother/two-parent scale was .96. A measurement of congruency on family communication was formed by taking the mean of the three scores and then subtracting each individual's score from the mean score and then summing the absolute value of these differences. The means, standard deviations, and the range are presented in Table 1.

Table 1. Description of Variables

Variable	N	Mean	SD	Range
INCOME	185	.20	.47	0-2
URBANICITY	201	.26	.76	0-5
FAMILY ACTIVITIES	247	3.36	2.25	0-13.33
STRESS LEVEL	247	3.26	2.29	0-13.33
RELATIONSHIPS	201	3.72	1.59	0-6
COMMUNICATION PATTERNS	247	3.94	2.58	0-12

CHAPTER V: ANALYSIS AND IMPLICATIONS

Results and Analysis

The data were analyzed using a one sample t test. This is a specific kind of t test which tests the mean of the variable against the assumed mean of zero (Arrow, 1960, Bruning & Kintz, 1968). Following the procedures outlined in Sokal & Rohlf (1969), six t tests were performed on the variables, i.e. income, urbanicity, family activities, stress levels, communication patterns, and family relationships. With high levels of congruency as were hypothesized with income, urbanicity, and family activities, very low levels of difference would be expected, i.e. the mean difference scores would be near zero which would be no difference or complete congruence. It was hypothesized that the null hypothesis would not be rejected with the variables of income, urbanicity, and family activities. The basic hypothesis was:

Stable, concrete family properties such as family income, urbanicity and shared family activities will have higher family congruency than dynamic, abstract family properties such as stress level, family closeness, and communication patterns.

In the case of the abstract family properties, it was expected that the mean difference scores for these variables would differ significantly from zero and the t

scores would be significant and the null hypothesis would be rejected. The significance level, set at .05, determines the probability that the null hypothesis will be accepted as reasonable or that errors made in the decision are due to chance (Keppel, 1982).

All of the t tests for the concrete, stable variables, income, urbanicity, and family activities were significant, thus, not supporting the hypothesis. Incongruency was high for these variables. The t test for all of the abstract, dynamic variables, stress level, family relationships, and communication patterns were significant, indicating a low level of congruence, thus supporting the hypothesis.

Table 2. Analysis of Variables

Variable	N	Mean	SD	T	Sig.	r
INCOME	185	.20	.47	5.79	.05	.39
URBANICITY	201	.26	.76	4.86	.05	.33
FAMILY ACTIVITIES	247	3.36	2.25	23.47	.01	.83
STRESS LEVEL	247	3.26	2.29	23.06	.01	.83
RELATIONSHIP	201	3.72	1.59	33.17	.01	.92
COMMUNICATION PATTERN	247	3.94	2.58	24.00	.01	.84

Significance level: $p < .01$

Because t scores cannot be compared due to their sensitivity to group size, the data were further analyzed by converting the t scores to r scores in order to look at the strength of the effect. The r score is not used in its

usual manner as a correlation, but as a comparable metric measure (although the r is a correlation between the family score and the assumed population). In other words, since we cannot compare t scores, these scores were mathematically converted to r statistics which are comparable. In this way, it can be seen that the effect or the amount of difference in family scores for family activities, stress events, family relationship, and communication pattern is more than twice the amount of difference in family scores for income and urbanicity.

Relationship of Findings to Schema

The present study demonstrated there were differences in congruency among family members depending upon the nature of the family property. Figure 5 locates the six family properties of this study on the continuum, based on the hypothesis. Family relations, stress level, and communication patterns fell into the Dynamic, Abstract portion of the continuum, while family activities, urbanicity, and income fell into the Stable, Concrete portion of the continuum.

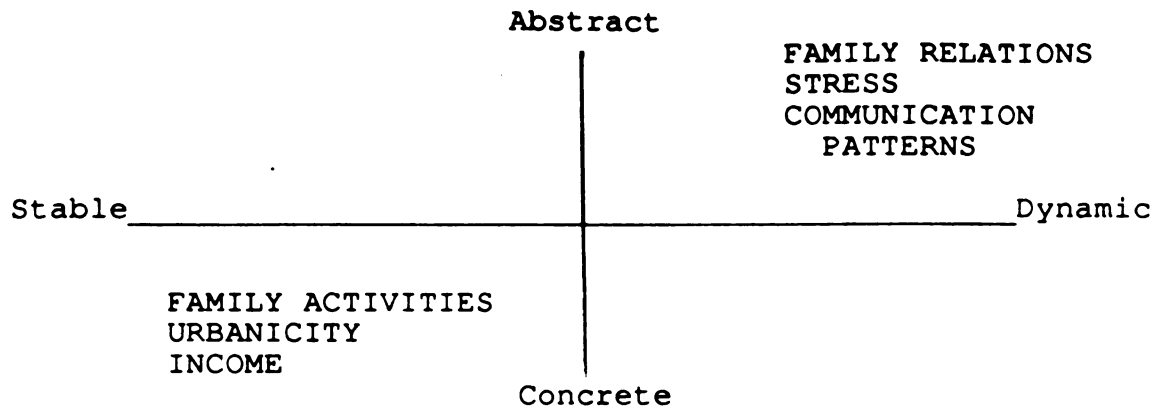


Figure 5. Hypothesized continuum of family properties.

Although the results of the study suggested there was incongruency on all family properties, higher levels of congruency were found among family members on stable, concrete family properties. As was hypothesized, income, and urbanicity showed lower levels of discrepancy. The results for abstract, dynamic variables, family relations, stress level, and communication patterns and the stable, concrete variable of family activities showed high discrepancy. Figure 6 locates the family properties on the continuum as indicated by the findings.

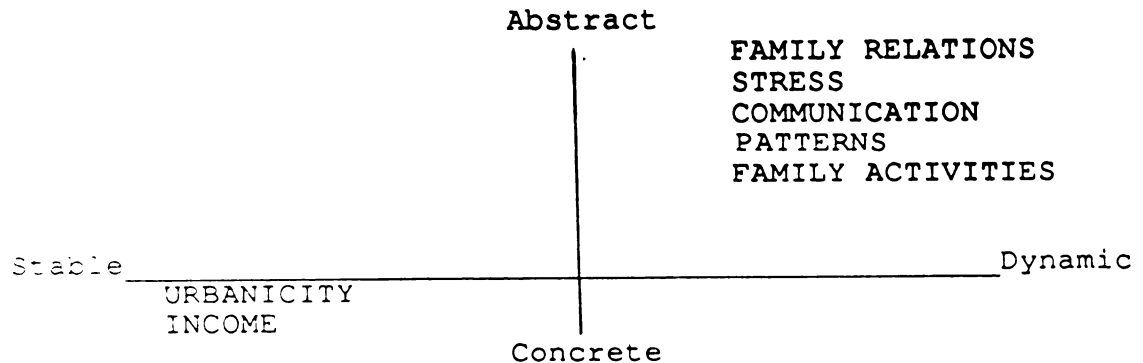


Figure 6. Continuum of family properties according to research findings.

These findings were similar to the research of Niemi (1974) and Cohen and Orum (1972) whose results suggested higher congruency with concrete, stable family properties such as demographics. Conversely, Niemi's (1974) findings also suggested high discrepancy for abstract, dynamic family properties such as family relationship, closeness, and family decision making just as the findings in this study suggest high discrepancy for family relationship, communication patterns, and stress. Ezell et al. (1984) also found that family perceptions of quality of whole life were not congruent which again is similar in abstractness to family relationship, communication patterns, and stress. Thus the findings on five of the family properties, i.e. income, urbanicity, stress, communication patterns, and family relationships, in this study resembled the findings in other studies. Ezell et al. (1984) and Berk and Shih (1984) found congruent perceptions about household tasks which are similar in concreteness to family activities and it was expected that similar levels of congruence would be

found. However, low levels of congruence were found which did not coincide with other findings.

This study did avoid one of the problems encountered by earlier congruency research. Congruency found in earlier research on families was influenced by the high percentage of the responses of both wives and husbands that fell into the same category (Quarm, 1981), i.e. bias in socially acceptable directions. This research avoided that problem by examining items which did not have a socially acceptable answer.

In addition, Quarm (1981) suggested that discrepancies between spouses may arise from the fact that spouses, when asked identical questions, interpret the questions differently because they are too general or ambiguous. This could certainly be true of almost all questions even those used in this study. It is hard to predict ambiguity in the urbanicity question. However, it is understandable that different family members could have interpreted "your relationship with your mother/father/child" differently. In addition, the respondents may have understood the questions, but they were not sure about the meaning of the possible answers (Quarm, 1981). The parent and youth may have felt exactly the same about their relationship, but may have different meanings for the words "very close." The more abstract the concepts used or the more complex the behavior being asked about, the more measurement error based on ambiguity of questions and answers would be expected. Quarm (1981) found that this measurement error

could be reduced through the use of scales and indexes. Consequently, scales or indexes were formed for the three variables where there were multiple questions.

Two of the stable concrete questions dealt with factual information to which one or both of the spouses did not know the answer. The spouses may not have known how much the household income is or one might not have known what size city in which the family lived. It may have been a problem in lack of knowledge rather than in discrepancy between the spouses.

Consideration might be given to the idea that income and urbanicity were not part of the family system but rather part of the the human built environment which provides the physical setting in which the family system operates. Income could be defined as the amount of resources with which the family has to operate and with which they can sustain, provide and enhance their built environment. However in this study, income and urbanicity were used as measures of the family system since family systems differ based on these variables. A rural family system differs from an urban family system, just as a highly cohesive family system differs from a family system which is low in cohesion. These are complex variables which affect more than one environment and measuring them as family system variables would be realistic. This discussion raises questions which could be studied in further research i.e. to identify differences in family properties based on urbanicity and also on

income. Do families in urban areas have different levels of cohesiveness than rural families? Do family systems with higher incomes have different communication patterns?

Previous research has generally found low family congruency. The findings here emphasize the importance of continuing to differentiate between the types of family properties being studied.

Limitations of the Study

1. The youth and parent interviews were designed to cover a wide array of topics, many of which were not used in this dissertation. This is a secondary analysis which accounts for the limited variety of subjects on which youths and parents were asked about each other.

2. The survey instrument needed more precision. For example, the options on the income had large ranges within each option. The mother could have believed the family income was \$20,000 more than the father did, but both would have chosen the same option.

In addition, the stress level variable was a mixture of abstract and concrete indicators. It had concrete stress events such as the death of a parent or the birth of a sibling mixed with abstract indicators such as "trouble with teacher" and "threatened by violence."

The dynamic abstract family property family communication was measured through the use of concrete, specific indicators, e.g. who do you/your child usually

talk to about schoolwork. The family property schema is clouded when dynamic abstract properties are measured using stable, specific indicators.

3. While this was a strong sample which drew upon families of early adolescents from across the state of Michigan, the limitations of the sample were apparent. Only by inference can the validity of reports from young children, or from young couples be discussed since all the families in this study were from one stage in the life cycle. Nevertheless, the validity of reports received from middle-aged youths as well as from middle-aged couples can be accurately determined and some worthwhile benchmarks for future studies using different age groups can be established.

4. Family members were asked about specific events or to label relationships, but they were never asked to explain their perceptions or behavior. Greater understanding of family processes and their meaning to family members would have been gained if they had been asked why they were close to one family member and not another, or why they talked to one parent and not the other or what was the meaning of eating together every night. Questions of this nature are more consistent with the interpretive mode of science which this researcher believes is more suitable for gaining insight into family structure and process.

Implications for Research and Theory

Additional research in this area must address several concerns. First, the previously mentioned limitations of the present study must be overcome in order to extend the results. More empirical verification is needed if these findings are to be generalized to other family properties. Future research needs to address all of the family properties rather than a selected few. In order to avoid problems with measurement, each property needs to be studied with a variety of instruments. Niemi (1974) suggests that agreement can be improved by the use of detailed questions or series of questions. Overcoming these limitations leads to several theoretical and methodological implications.

As Fay (1975) suggested the task of the interpretive social scientist is to discover the set of rules or patterns or underlying processes which regulate the family system. This study attempted to organize family system properties in a schema which can be utilized by researchers and practitioners. Based on the congruency findings of this study and others, concrete, stable family properties can be more accurately reported by one family member than dynamic, abstract properties. However, large amounts of incongruency are found even in concrete, stable family properties. More importantly, the abstract, dynamic family properties are those the social scientist needs to study because they represent the processes which operate in the

family system. Because of the high discrepancy demonstrated by these properties when reported by various family members in this and other studies, these properties are only discoverable empirically by observation of behaviors of all family members. This study reinforces the belief that family processes must be studied directly and cannot be inferred from individual data. Each individual has his/her own perception of reality. What is important is to study the family processes not the individual's perceptions.

These family processes can best be studied through direct observation of the family. Ideally, families from a variety of life stages would be observed over long periods of time engaged in a variety of activities. Of course, the researchers would have to observe until they began to see processes which the families utilize, and not just observe until the researchers confirmed their preconceived notions of family processes. Observers would then discuss the families' interpretation of the family processes with the family. Only in this way can the scientist generate propositions about family processes which can be tested more widely and consequently, generalized to all families.

These abstract, dynamic properties of the family system exist as a part of the total life system and therefore must be studied as a part of the environment which surrounds them. Just as the family system is more than the sum of its total parts, combining individual family member scores does not represent the total family as was demonstrated by this study. The researcher needs to

ask the participants the meaning of the behavior or their perception of the environment and thus draw inferences directly from the participants in order to find causal or intentional explanations. In other words, an interpretive or hermeneutic mode of science is needed.

In addition to the need for interpretive science being the basis for research, a different theoretical schema could be suggested from the findings. The differences found in the levels of congruency suggest a difference among the variables other than that which was hypothesized. Income and urbanicity had much lower levels of incongruency than family activities, stress level, communication, and family relationship. These findings suggest a different schema for organizing family properties. As was suggested earlier, consideration might be given to the idea that income and urbanicity were not part of the family system but rather part of the the human built environment which provides the physical setting in which the family system operates. Income could be defined as the amount of resources with which the family has to operate and with which they can sustain, provide and enhance their built environment. The other variables in this study represented process or relationships in the family system. The typology or family property schema suggested by this data consists of family environmental factors and family relational properties. Family relational properties are those which are deal with social processes within the family system. Most of the stable, concrete variables,

discussed earlier would be environmental factors in this schema, while stable, abstract properties, e.g. family culture would be relational properties. All of the dynamic family properties would be relational properties, e.g. cohesion, adaptability, communication. This study found differences in these two types of variables. The task of the researcher would be to extend this research to other families and other family properties. Researchers need to examine family systems to see if these two types of family properties do have different characteristics. This study suggests differences in amounts of incongruency.

Commonsense tells us that since family environmental factors are more concrete, they are easier to quantify and therefore easier to objectively study than the more abstract family relational properties. In addition, one might hypothesize that family relational properties would be more predictive of family satisfaction or of family functioning. Moreover, it would be interesting to find out how family members' perceptions and evaluations of family environmental factors differ from those of family relational properties.

Conclusions

The significance of this dissertation comes not from its importance as a study of family congruence, but as a theoretical schema in the larger issue of the study of the family. It is apparent that to study the family, one must arrive at inter-subjective understanding of one another.

Yet, if individual family members fail in this understanding, the researcher will also fail in his/her task. Interpretive science philosophy, i.e. the inter-subjective understanding of one another, integrated with the family systems perspective, provides the appropriate research schema. If, as Paolucci stated, "the family is the most elemental group, for it is here that individuals interact more frequently, more intimately, and over a longer period of time...", then, the research must focus on family properties, not individual properties of family members. Furthermore, family properties must be studied from the systems perspective, encompassing all of the environments in and with which the family interacts. Only then, will contributions be made to the improvement of the quality of life.

APPENDIX

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
238 ADMINISTRATION BUILDING
(517) 355-2106

EAST LANSING • MICHIGAN • 48824-1046

February 3, 1983

Dr. Joanne Keith
Family & Child Ecology

Dear Dr. Keith:

Subject: Proposal Entitled, "A Comprehensive Approach to Research
and Programming for School-Aged Youth"

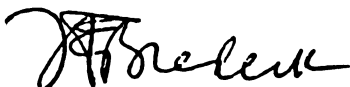
UCRIHS' review of the above referenced project has now been completed. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and the Committee, therefore, approved this project at its meeting on February 2, 1983.

You are reminded that UCRIHS approval is valid for one calendar year. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to February 2, 1984.

Any changes in procedures involving human subjects must be reviewed by the UCRIHS prior to initiation of the change. UCRIHS must also be notified promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,



Henry E. Bredeck, Ph.D.
Chairman, UCRIHS

jms

cc: Dr. Leah B. Hoopfer
Christine Nelson

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BIBLIOGRAPHY

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