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ASYMPTOMATIC MARITAL INTERACTION, STRUCTURE AND PROCESS: 
A SYSTEMIC MODEL FOR PATTERN RECOGNITION

DISSERTATION

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

By
Judith Claugus Penrod, B.S.S.W., MSW

* * * * * *

The Ohio State University
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ACKNOWLEDGMENTS

I am grateful to my family, friends, and professors at The Ohio State University and the Gestalt Institute of Cleveland who have taught me through their sharing, generosity and commitment the meaning of self-actualizing relatedness.
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CHAPTER I

INTRODUCTION

Problem for Social Work

Social work clinicians are expected to understand and help family systems who, at times, experience difficulty and ask for professional help. These are families who generally function well and may need assistance for short periods of time in order to resolve their present problems. These families do not fit into the extremes of dysfunction which have comprised the research and clinical populations during the past thirty years. Little is known about (1) the process and structural characteristics of these viable systems, (2) how to observe and assess their interaction, and (3) how to design and implement system level interventions which address the system unit rather than the individuals who comprise the unit (Barnhill, 1979; Bateson, 1972; Olson, 1979; Maslow, 1977; Hoffman, 1981). Knowledge about the interactional processes in family systems has primarily developed from the study of symptomatic family systems, such as the direct observations of family interactions relative to an understanding of schizophrenia (Bateson, et al., 1945, 1963; Haley, 1962; Caputo, 1963;
Beavers, 1965; Singer and Wynne, 1963; Mishler and Waxler, 1965, 1968, 1975). There is a consensus in the professional literature that more knowledge is needed about the interaction processes in viable family systems who are able to resolve problems without generating chronic emotional symptomology in one of the family members (Olson, 1979; Haley, 1972; Barnhill, 1979; Maslow, 1977; Hoffman, 1981; Satir, 1972; Jackson, 1965, Raush, Grieg and Nugent, 1978).

The decision to focus exclusively on asymptomatic couples in this research is based on this gap in our verified theoretical knowledge. The objective is to learn more about a wide range of marital systems which function without generating and maintaining disabling emotional symptomology in their nuclear family system; i.e., how they share, take in and process information as a unit, how they deal with individual needs and wants in relation to the other and if and how they resolve individual and joint problems.

An additional problem for social work clinicians is the lack of a widely accepted empirically verified systems model for clinical assessment and intervention which is nonlinear, holistic and value free in relation to a health/illness continuum.
Need for a Clinical Nonlinear Systems Model for Marital Therapy

The past thirty years has witnessed a changing conceptual shift in focus from the individual and his nature to the systematic pattern of behaviors individuals develop in interaction with others. Yet there is a lack of verified theory for describing and explaining behavior beyond the individual system level (Miller, 1965, 1972 and 1980; Hearn, 1969; Olson, 1975). According to Olson (1975a), the field of marital therapy is in serious need of a theoretical base. He concluded from a comprehensive review of the literature in this field, that the past theoretical work has not been fruitful in generating research for model development. This research attempts model development for marital therapy.

The shift in therapeutic focus from isolated individuals to relationship systems has resulted in the need for an appropriate paradigm. Although there are increasing networks of clinical literature related to family systems therapy, there is no widely accepted conceptual framework for assessment and intervention which is systemic and nonlinear (Bodin, 1968; Keeney, 1979).

This research explores the usefulness of a specific theoretical integration translated into a conceptual framework for assessment and intervention with married couples. This model attempts to reflect a nonlinear, holistic
transactional epistemology. It emphasizes pattern recognition, interrelationships of behaviors, circularity and discovery of system functionality without ascribing labels or judgments regarding the dimensions of health/illness.

Traditionally, clinical assessment has involved ascribing a label to an individual in order to signify the particular pathology represented by the specific set of symptoms exhibited. The argument of systems-oriented therapy is directed toward the assumption that the individual is the site of pathology as a consequence of linear causal effects. Within the practice of family therapy some therapists identify with the psychiatric, medical model and articulate a system's perspective, which results in linear, causal thinking and a diagnosis which focuses in changing the behavior of the identified patient by changing system members' responses to him/her. This kind of diagnostic thinking represents a linear systems epistemology. It represents an analytical logic concerned with combinations of discrete elements.

Many of the present system models reflect this sort of linear thinking and confusion is created when one thinks in such a way while attempting to identify and explain a relationship system (Keeney, 1979). For example, when one considers a relationship system as a combination of discrete elements (i.e., ideas, values, motivations), one is using a linear, systemic paradigm. Therapists who assess families
by making individual assessments and then summing these to derive a family diagnosis exemplify linear system epistemology.

Assessing and intervening in a nonlinear systemic fashion requires a new paradigm which offers the clinician a framework for seeing and understanding in a holistic, interconnected context. The systems axiom of nonsymmetry asserts that information obtained from parts of the system cannot be summed to represent the whole system. Yet, many of the present system models articulate systemic ways of assessment and intervention which contain ideas and metaphors from linear epistemology (Haley, 1977; Minuchin, 1974; Satir, 1972; Palazzoli, 1980; Whitacre, 1979; Hoffman, 1981; Bowen, 1978; Watzlawick, 1978). The theories generated from these models, although systemic, include a linear rationale.

The proposed model in this research attempts to be nonlinear. This epistemology is based on the ideas of organismic systems theory, Gestalt psychology, phenomenology and a synthesis of "family system theory" (which includes communication, cybernetic, and interactional theory—specifically theory dealing with the concepts of differentiation and fusion in interactional behavior).

These theories support the model for assessment and intervention with marital systems. It is introduced in this study to explore its reliability and validity as a clinical model which attempts to offer an alternative to the existing
linear system models. The objective of the model is to offer the clinician a guide for pattern identification in intimate dyadic systems. The model is designed to generate assessment without accompanying labels of functionality ascribed to the phenomena observed. Nor does it contain a framework for explaining causality of symptoms experienced by a specific family member (i.e., reifying the concept of the individual as the site of the pathology). Instead, it offers a way of organizing and describing the phenomenological interactional data which produces translatable information about the patterns of behavior idiosyncratic to that system. The interactional data are organized around major areas of the system's processes (i.e., how information is shared and processed, how contact operates and how tasks and interactions are resolved and finished).

The clinician who desires to intervene in a systemic, holistic way needs a way of seeing and understanding what they observe in intimates dealing with each other. A major objective of the clinician is to accomplish focused observation. They need to know what to look at and how to translate what they see into language which describes experience. The language should accurately describe the phenomenological process and be understandable to others (the client system and other professionals). An assumption in this clinical model is that the client system is entitled to feedback from the therapist about its operation
as a system. Furthermore, a therapeutic objective is to reach the system about its processes so that it has more information about its potentialities and options for living. This information generates a couple interactional profile or paradigm which emphasizes a couple's unique "singularity" as a system, versus how it measures against an a priori set of criteria regarding dimensions of health/illness.

This model is based on an epistemology which values "what is" (i.e., the phenomenological process, the wisdom and integrity of the system, and how it operates) versus an epistemology which values specific behaviors as optimal leading to directing and manipulating systems in specific directions. The proposed model in this research values the decisions of the client system regarding where it wants to go and what it wants and needs to facilitate satisfying experiences which fit for them as a couple. This conceptualization differs from many of the present family system models currently in practice (i.e., structural, strategic, Bowenian, Satir's eclecticism, Milan's systemic model, behavioral models and psychoanalytic models).

Current practice in family therapy could be expanded by the inclusion of a model which emphasizes phenomenological process, pattern recognition, context and interrelations. Seeing and understanding present interconnectedness
replaces the traditional search for isolated components which are combined into etiological explanations.

The literature of 1980 and 1981 reflects a direction away from etiological linear system models, however, the current models in practice do not reflect this new direction (Hoffman, 1981; Keeney, 1979; Dell, 1981; Elkaim, 1981). Included in the new direction of systems thinking is the identified need for a conceptualization which describes and explains system stability and evolution for each idiosyncratic system (Steinglass, 1976, 1977, 1978, 1980; Hoffman, 1971, 1972, 1981; Speer, 1977; Wertheim, 1973; Elkaim, 1981; Dell, 1980; Beavers, 1976). This need is experienced by clinicians in their work with systems struggling to find their balance between constancy and change which will fit their systems unique needs, values and history. The clinician who has a conceptual model which deals with the concepts of homeostasis and evolution without health/illness judgment is equipped to assist systems with this struggle. The model should help the clinician discover each system's unique ways of functioning and provide information about how "that system's" processes and structure make up its evolutionary style.

**Major Goals of Research**

The overall goals of this research were to obtain information about viable, asymptomatic marital system
interaction and to design and explore the reliability and validity of a nonlinear systems model for assessment and intervention with intimate dyads.

The first objective was to add to our knowledge base about the kinds of process and structure which characterize viable marital systems who may become temporarily symptomatic, but do not become stuck in clinical extremes of dysfunction (i.e., debilitating anxiety, depression, repetitive destructive behavior toward self and/or others, detachment or enmeshment which impairs functioning ability, chronic marital stress and/or crises). The goal was to learn more about the variety of interactional styles which viable family systems use to effectively handle their family tasks and achieve individual growth and fulfilling relatedness in the process of task accomplishment.

The second objective was the development of a useful relevant systems model which is nonlinear, holistic and capable of identifying patterns, and interrelationships via process observation and analysis; as well as provide intervention strategy which will be system focused, versus individual oriented. The model should (1) organize the phenomenological interactional data, (2) describe this process in understandable translatable language for clients and professionals (i.e., putting experience into language), and (3) establish intervention goals and objectives for change when system processes are observed as interfering
with the system's optimum functioning, as defined by that system based on its own unique needs, wants, values and history.

Sub-dimensions of Major Research Objectives

The following questions represent some of the components included in the major research objectives. The specific questions represent areas for exploration, data gathering, and analysis in order to accomplish the overall major objectives.

1. What are the verbal and nonverbal behaviors in asymptomatic marital interaction during a problem solving encounter?

2. Is there an identifiable temporal structure which offers some ordering of behaviors within the process?

3. Are patterns observable in the data regarding behaviors clustering during specified time periods within the process?

4. Can the measuring instrument (category system) demonstrate acceptable reliability percentages?

5. Are the behavioral indicators used in the category system to define conceptualized interactive process useful, understandable, and reflective of empirical reality?

6. Does the conceptualized interactive process as operationalized in the category system reflect, and/or describe
with any accuracy the empirical phenomenological process being observed?

Cross-System Level Research

Obtaining data about structure and process on one system level (i.e., an intimate dyad) contributes information which can help formulate hypotheses for the next system level of organization (i.e., the nuclear family). The continued development of family systems theory and a systems model for social work theory is dependent upon more data in this area (Hearn, 1969; Miller, 1980). Miller recommends cross-system level researches comparing similar processes at various levels of living systems (1972). Hearn recommends studies of certain aspects and sub-systems of the organism (1958) (for example, marital sub-system). According to Gordon Hearn (1969), "the general systems approach to knowledge building is particularly well suited to the profession of social work. The entities with which social work is involved can all be regarded as systems, with common properties, individuals, families, small groups, organizations, neighborhoods and communities. The general system approach can be used to order knowledge about the entities with which they work and to develop a fundamental conception of the social work process itself" (p. 2). The data gathered in this study on one system level, the marital subsystem, could be analyzed in the analogistic form
of theory building. A hypothesis for the next level of systems organization (nuclear family) could be generated by the data. The development of behavioral propositions which can be tested at various system levels and found to be applicable at a variety of system levels (individual, couples, families, groups, organizations, etc.) has direct impact for social work theory development and practice. Miller has formulated several dozen specific propositions, each testable at the organizational levels of cells, individual, group and society.

Certain of these are directly applicable to social work practice. If there are principles which apply to organismic systems in general and if individuals, groups, organizations, and communities may be regarded as such systems, then these principles collectively might comprise a framework in a unified theory of practice (Hearn, 1969).

The Connection between Research Objectives and Past Research Literature

Selected theories were reviewed and evaluated regarding their potential inclusion in a synthesis which could provide a useful theory base for clinical practice with intimate systems. Those theories chosen as most relevant and having the potential for generating research hypotheses are reviewed in the literature chapters. The clinical model proposed in this research evolved from these theories.
The history of family interactional research was traced to give the reader some perspective of how and where the present research fits into the evolution of family practice and research. Research is a building process and this study is no exception. It builds upon the work of past clinical model development within the systems perspective. Thus, the evolution of model development is present to highlight this process and support the present proposed model. This review revealed the lack of model development in the nonlinear, holistic systemic epistemology. The identification of this gap motivated the development of the proposed model explored in this investigation.

The theory review also revealed a gap in our knowledge about the structure and process of viable, asymptomatic marital interaction, as well as a need for more information regarding the generic system processes on the dyadic level of organization (Hearn, 1969; J. Miller, 1976, 1980).

The selected review of research literature revealed specific studies which have added to the knowledge base regarding family system interactional processes. These studies have been highlighted to identify the clear and substantial contributions within this area of exploration. They have led to the present investigation by generating questions for future research based on their findings.
Summary

This research project is searching to answer the question of "what is" (i.e., the phenomenological process and structure of asymptomatic marital interaction during a problem-solving activity. Data were gathered to learn about what behaviors occur and how they are connected, spatially and temporally. Pattern recognition was the focus of analysis. The study evolved from clinical and research interests. Family interactional research and practice has its roots in this dual professional orientation. Research and practice have seemed to reciprocally support each other's growth. This integration has been maintained for thirty years and continues to be sustained currently. The clinician's task is to see the family as a unit and think of the family as a unit in order to help the system alter its dysfunctional interactional pattern. The researcher's task is to provide a valid, reliable objective description of interactions. Thus, the research problem is how to conceptualize the repeating, recursive behavior in such a way that statements about the patterns within the interchange accurately reflect the couple's process now and have meaning.

This study explores the potential usefulness of a nonlinear system model which offers a vocabulary and an order for describing the phenomenological components of marital interaction. The model describes the components and their
interrelationships, i.e., what behaviors cluster together and in what time sequence. This produced a profile of "what is" without assessing characteristics related to "normality" or "deviancy." The review of literature which follows the problem statement describes selected interactional studies which have focused on investigation of process and structure and consequent model development.

Analysis of these studies reveals the clear dominance of outcome oriented process research which utilizes various variables considered critical in determining system functioning. Differentiating family systems have resulted in the development of typologies oriented conceptually by a functional/dysfunctional paradigm. The health/illness, "normality"/"deviancy" epistemology has dominated research and practice in this field. It is now being questioned as the most useful direction for research now and in the future (Palazzoli, 1980; Haley, 1972; Kantor and Lehr, 1975; Bateson, 1972; Hoffman, 1981; Keeney, 1979; Reiss, 1981; Dell, 1980; Olson, 1975, 1979).

The study attempted to implement a step toward a new research direction. Thus, the methodology utilized in this study was developed in an effort to design and test a new generic, judgment-free, model for describing marital interaction without outcome evaluations of process variables. Due to its newness, data analyses were initially concerned with establishment of reliability percentages.
Acceptable inter-observer reliability was established. The next issue in data analysis concerned looking at what the model did generate in respect to the original research question. Individual couple interactional profiles were created. Knowledge was also obtained from analyzing the usage pattern of specific behavioral indicators utilized in the instrument. These data have implications for future clinical and research application of the instrument. The final chapter concerned the discussion of what meaning can be derived from the data collected and analyzed. Specific information was produced which focused on the areas of interest in this research. The questions which motivated the study were answered and new questions were stimulated by the data. Potential area for future research were identified as relevant subsequent steps building on the information generated from this study.
CHAPTER II

LITERATURE REVIEW

Introduction

The literature review provides information regarding the historical roots and evolution of research in the family interactional field. Understanding the history of the research process in this practice area enables the reader to place this investigation in perspective with the entire pattern of research development concerning this topic. Evaluation of this study is facilitated by knowing about what has been studied in the past; including the methodology utilized and the hypotheses and questions generated. In addition, an historical review highlights what is known and not known in the present. Gaps in theory for clinical model development are identified, as well as areas requiring information to allow hypothesis generation. Knowing about past research within a specific area of exploration guides present research by identifying appropriate relevant research needs which will continue a congruent knowledge building process. Contributions become useful if they are connected to what is needed to extend knowledge. Fragmented research generates information which may not be utilized as its meaning and relevancy is unclear.
The building process in research is a central principle. The process of theory development involves understanding what has been learned and developed by other scientists as well as its applicability in the past and present. Understanding what methodology was effective and noneffective and why, guides present methodological design. Thus, a review of literature focused on the specific area of exploration which this investigation chooses to study elucidates where the "state of the art" is within that subject. Relevant research directions become identified for current study.

The literature chapter contains several areas of information. The reader will find a descriptive summary of theories selected on the basis of their potential usefulness in formulating a synthesis for a conceptual base for marital therapy.

The theories highlighted in this review have generated hypotheses which created the proposed clinical model explored in this study. The theories contributing premises which guided this model development are the following: general systems theory (organismic model), Gestalt psychology, communication theory, phenomenology and a synthesis of "family systems theory" (which has evolved from numerous theoreticians). Specific concepts were selected from this eclectic theory classification to discuss due to their relevance in this investigation (i.e., differentiation and
fusion in marital relationships; stability and change within marital relationships). Many of the important concepts within the "family systems theory" were not included in this theoretical discussion as they had no direct connection with the specific research project.

Included in this historical review is a brief review of the history of one of the major research directions in family interactional research; a summary of the research which focused exclusively on marital couples and some of the methodological issues raised in marital research; theoretical support for the study of the marital subsystem versus the entire nuclear family.

A major part of the literature review presents the evolution of typologies for organismic family systems. This represents a substantial area in order to ground the model presented in this study. This evolution of family system models emphasizes process--interactional oriented paradigms which utilize a systems theory orientation. Other models which are based in learning-behavioral or psycho-analytic theory are not included in this review. Many important typologies were excluded as they were not connected to the research direction central in this study. The typologies selected represent some of the major contributions to the development of holistic systemic process oriented models which have focused on interrelations, pattern recognition and context (i.e., "how things
fit together, how the system is wired—connected).

The theoretical review should clarify how this investigation fits with other research in this area. The building process of theory development was illustrated by the major research questions guiding this study. These major research objectives deal with theory development at two different stages. The first objective was to obtain information about viable, asymptomatic marital interaction to enable hypothesis generation (i.e., this system level). The process would involve application on their next level of system organization. The second major goal was to explore the usefulness (i.e., reliability and validity) of a conceptualized model of viable, asymptomatic marital interaction.

This investigation utilizes an exploratory design. The rationale for this design choice is supported by the identified gaps in the literature (i.e., information to generate hypotheses regarding viable marital interaction and a clinical model which can reliably identify interactional patterns without accompanying labels of health/illness; as well as describe and explain the processes of stability and change; differentiation and fusion within marital interaction). Theory was presented which generated the hypothesized conceptual stages, behavioral indicators of the stages and the holistic patterns (a cyclical process based on an epigenetic principle).
The research and practice direction for the 80s pointed out where family interactional research, theory and practice had been and where the new thinking and practice was headed. This discussion was included to give some grounding for the proposed model for practice.

The literature of the 80s is revealing a trend away from health/illness, linear assessments and toward value free, wholistic assessments which describe accurately "what is" and include a conceptual rationale for the processes of system change. Yet, there are no widely accepted nonlinear systemic models for practice. The models which are currently in use in family systems therapy all include some traditional linear ideas which are combined with systemic epistemology. The consequences for clinicians is confusion, and impasse at times. The consequences for theory and model integration are confusion and impasse as well. The behavioral manifestation is continued fragmentation, separateness, and criticism from within and from outside the field. This disagreement could support growth if some of the theoretical confusion regarding basic systems concepts were clarified in each clinical model.

It is of key importance to identify the model's underlying premises regarding linearity. The model proposed in this research attempts a nonlinear perspective. It was developed to fit with the direction of the 80s in this field. Thinking and practice are becoming more holistic and
nonjudgmental regarding health/illness criteria, concurrent with understanding system operations via identifying their interconnectedness and fit for that system. Interventions with systems are becoming concerned with supporting system singularity. The goal is to help it discover and achieve its identified needs for becoming more what it wants to become, via its own unique style, values, history, etc. The world of clinical practice is usually ahead of the theoretical world. This exploratory research is designed to test the potential usefulness of a nonlinear systems model which would support the practice of current therapists who are striving to work with systems in a holistic nonlinear fashion.

**History of Family Interactional Research**

**Methodology and Population Focus**

Family interactional research has its roots in the family therapy movement. Before the research areas developed, research on "the family" was conducted by sociologists and consisted of surveys, case studies and self report data. Methodology utilizing these measures has been criticized by most interaction investigators as invalid for learning about family process.

Researchers studying "the family" generally agree that interactional processes can best be measured with behavioral methods. Self-report and case study methodology
tap different dimensions of interpersonal relationships. For example, if one is studying self-concept, attitudes, personality characteristics, etc; self-report measures would be effective or they would also be effective when assessing descriptions of relationships with others (role expectations, marital satisfaction, etc.). However, the assessment of interactional processes requires behavioral methods utilizing observers to record observations. Numerous studies have demonstrated that self-report measures do not provide reliable, valid data regarding description of the phenomenological process the participants were involved in (Levinger 1963; Olson and Rabunsky 1972; Turk and Bell, 1972; Kenkle, 1963; Olson and Cromwell, 1975), Olson, 1969, 1977, Jacob, 1975, Straus, 1973, Murphy and Mendelson, 1973).

As a result, the past 20 years have witnessed an increasing number of direct observation studies, conducted by clinician-researchers who were interested in studying the interactional patterns of families of varying size and combination. Although in vivo observation of families begun during the 1950s, Jacob reports that almost all direct observation studies have appeared since 1960 and nearly 50% of these have appeared since 1968 (p. 35). The objective in interactional research is systematic observation and assessment of the family interaction as a
unit (Jacob, 1975; Doane, 1978). Jacob (1975) states "that direct observational methods require fewer assumptions and/or influences than self report procedures and at least, potentially, represents a scientifically sound methodology" (p. 34).

Most of the work involving the actual observations of families as they interact had been oriented to an understanding of schizophrenia. The major thrust for the development of that research perspective evolved from the experiences of clinicians who integrated research into their clinical practices. The dominance of psychoanalytic theory and practice was clear and difficult to influence. The concept of transference interprets seeing relatives as contaminating the treatment process. Thus, "treatment" occurred mostly in the guise of research. The literature during that time discussed seeing family members for research purposes only. These pioneer clinician-researchers were interested in the "family perspective" to aid their understanding of etiology, and to facilitate assessment and treatment with schizophrenic individuals and their families. Behavior disorders and delinquency in children was another diagnostic classification which demanded a "family perspective" to enable effective assessment and treatment. Frustration with ineffectiveness of traditional psychoanalytic theory and therapy for treating these populations motivated the new clinical-research direction.
Major Findings from Study of Dysfunctional Family Systems

As an outcome of the study of dysfunctional symptomatic family systems, much data have been gathered and organized regarding specific structural and process variables which could potentially discriminate symptomatic and asymptomatic family systems. There exists a great deal of controversy in the family interactional field regarding the meaning and validity of the research data which attempts to document such discrimination (Riskin and Faunce, 1972; Jacob, 1975; Doane, 1978 and Solvberg and Blaker, 1980). Jacob (1975) in his review of 57 interaction studies which compare "disturbed and normal" families concludes that the studies are inconsistent with one another and that because of methodological problems, it is virtually impossible to untangle these inconsistencies (p. 62). He states that "family interaction studies have not yet isolated family patterns that reliably differentiate disturbed from normal groups" (p. 56). Doane (1978) reviewed the same literature by Jacob, plus relevant studies published since Jacob's review and found "areas of consistency" within the literature. Doane organized his review into four areas; conflict, dominance, affect and communication clarity. He chose quantitative process measures, qualitative measures, and outcome measures to further classify the studies and their respective data. The organizing principle was to analyze
findings in relations to "pockets of consistency" as differentiated from areas which were not useful in discriminating disturbed from normal families. He evolved from this analysis "dimensions of family interaction" which appeared to be potentially fruitful, relevant areas for future exploration (p. 358). Within the conflict and dominance studies, he looked at "pure process" measures, family structure, family harmony and family efficiency and effectiveness. The other classification was communication studies; within this group he looked at communication deviance, acknowledgment, clarifying conflicting messages and the corrective parent. Despite the difficulties inherent in family research, Doane insists that the data support some clear trends.

Although these reviews are primarily focused on research attempting to discriminate disturbed and normal family process and structure, the overall trends in the data, identified by Riskin and Faunce (1972), Jacob (1975), and Doane (1978), can serve as a guide to future research in the field. The general propositions which have emerged, guided the present study. These include: (1) disturbed families are characterized by dominance of cross-generational alignments and a corresponding weak parents coalition, as well as a conflicted marital relationship; (2) normal families have more flexible patterns and general harmony and variety of their behavior, they are able to
function more effectively on a variety of tasks; (3) focus is sustained and closure delayed until all ideas are expressed and group consensus achieved. The studies in total suggest that the marital relationship is a crucial variable (subsystem) to consider in family research. Doane concludes that "although studies of the whole family are certainly important, perhaps more attention should be paid to the impact the couple has on the family system" (p. 373).

History of Couples Research

The review of literature concerning couples reveals very few which focus on process, interactive patterns (Sprinkle and Olson, 1978; Gottman, Markman and Notarius, 1977 and Vincent, Weiss and Bircher, 1975). Most studies of couples have focused exclusively on what partners feel or think about each other or activities they share together rather than the process and interactional styles that led up to and help maintain these outcomes (Sprinkle and Olson, 1978; Hicks and Platt, 1970; Kolb and Straus, 1974; Cromwell and Olson, 1975). The latter generally offer aggregate measures of couples' process and judge the outcomes in relation to specific variables of interest to the investigator. This is differentiated from a measure which describes the existential phenomenological process of marital interaction, utilized in this study.
This investigation is focused on the interactive dimension of the marital relationship and proposes an interactive process and structure which may be observed in couples who are not experiencing a crisis or severe symptomology in either spouse. The developmental history for this conceptualization is presented to explicate and ground the proposed paradigm. Some of the major contributions to the development of "family systems theory" are discussed due to the key role they have played in forming the theoretical base for all current and future family interactional research. The specific theories chosen to build this model will be discussed later in the literature chapter as they build on some of the seminal work done in "family systems theory development."

Key Theoretical Contributions to the Development of Family Systems Theory

Review

The family therapy research movement demonstrated a conceptual shift from individually based human behavior theory to a present oriented interactional theory. Gregory Bateson's work was central to the development of systems thinking in relation to human behavior. This work is described by Watlzewick, Beavin and Jackson's Pragmatics of Human Communication (1967). Along with Bateson in California was Murray Bowen at Menninger's and Nathan Ackerman in New York. These three leaders were independently
building a clinical-research base. Bateson's group in Palo Alto and Bowen's group in Washington D.C. focused on investigating the family as a "system." System was finally defined as a unit with interrelated parts which co-vary with each other via feedback processes in an error-activated way to maintain system balance and integrity. Their definition emphasized the processes which maintain system equilibrium and the key role of symptomatic behavior in maintaining homeostasis.

Communication Theory's Contribution to Family Systems Theory

Communications research during the 1960s led by Bateson at the Mental Research Institute in Palo Alto produced a series of landmark papers by Jackson, Bateson, Haley and Weakland (1956). Their work was focused on understanding the etiology and maintenance of the schizophrenic process as well as exploring new therapeutic strategies based on this new conceptual orientation. The double bind literature was a part of this group's work (Watzalwic, 1967).

The work at the Mental Research Institute was focused entirely on discriminating communication on the basis of symptoms. Studying schizophrenia communication was figural for them and led them to exploration of other emotional disturbances and their connections with family communication patterns. This micro-analytic methodology
was the cornerstone of communications research and influenced many researchers who were following the direction of connecting symptomology with family communication patterns. Wynne and Singer were included in this group. Their work supported the general hypothesis: family communication patterns can be used to discriminate families on the basis of symptomology.

Other research supporting this direction has had a significant impact in the development of family systems theory and therapy (Bateson, et al., 1956; Jackson, 1957, 1965, Haley, 1959, 1962, 1964, 1967a, 1967b; Ferreira et al., 1963, 1965, 1966a, 1966b, 1968; Doane, 1978; Caputo, 1963). The symptom model for classifying families was followed by a sequential interactional model developed by Jackson and described in *Mirages of Marriages* (1958). Jackson's group built on Bateson's work with schizophrenic relationships. The typology for classifying marital couples remains a classic in the field for establishing a system typology for couples (separate from their children and not connected with symptoms). However, these conceptualizations of the communication process also relied on homeostasis as their orienting perspective. Concepts for describing and explaining system growth and change were not included except via the role of positive feedback processes which bring about destructive change in a positive feedback study (i.e., the system becomes off balance,
and out of control resulting in system dissolution or irreversible, undesired alternatives). This cybernetic paradigm developed primarily by Bateson became the key concept in the field for describing symptomatic behavior and dysfunctional family systems resistive to change. The symptomatic behavior was considered functional to system survival.

The organism always searching for balance and returning to a presumed steady state explained the redundancies in interactions observed by clinicians and theoreticians in their work with symptomatic and asymptomatic family systems. This theoretical perspective was powerful enough to move the field away from individually oriented conceptualizations.

As discussed earlier, much of the theorizing about family systems was done by family therapists in their study and treatment of symptomatic families. They generally viewed these families as primarily concerned with maintaining the status quo (Haley, 1969, 1956, 1964; Lederer and Jackson, 1968; Lennard and Bernstein, 1969; Riskin and Faunce, 1972; Jackson, 1956, 1957, 1964 and Satir, 1964). Haley (1964) articulated this perspective as a proposition, "When an organism indicates change in relation to another the other will act upon the first so as to diminish and modify the change" (p. 189). He proposed that the family functions primarily to maintain the status quo.
Bowen's major contributions to family systems theory are the concepts of multi-generational transmission of emotional illness, therapeutic work with the family of origin and the "differentiation." Related to this thinking is the concept of triangulation which is a process that occurs in all families. This concept approximates Haley's central idea upon which he built a theory of pathological systems and Minuchin's structural approach to family theory. Triangulation refers to the formation of a three person system by a two person emotionally bonded system when they are experiencing stress. The tension shifts to a new twosome, relieving the tension between the original pair. This alliance shifts when new family members and/or outsiders become involved in a specific struggle. It is a dynamic, fluid process of triangling within a fixed chain reaction in those families who have a long history together and have a chronically emotionally disturbed member. Bowen associates pathology with rigidity and suggests that all families create triadic patterns; these patterns become more rigid when the family is experiencing stress and will be more flexible in periods of calm (Bowen, 1978).

Bowen's contributions to family systems theory is highlighted in this theoretical review as his thinking was moving away from a linear definition of dysfunction. His
work reveals an interest in the evolutionary process of the extended family group rather than "pathology" as a condition transmitted from one generation to another. For example, if a family member can achieve a more flexible position in a triangle in the extended family system, this can have repercussions on other closer triangles the person is concerned with. Thus, Bowen's concepts reflect a process oriented, nonlinear epistemology.

**Structural Model's Contribution to "Family Systems Theory"**

Another model for conceptualizing family systems evolved from the work of Minuchin and Montalvo (1967). Their population were families from low income urban centers who appeared disorganized and delinquency prone in contrast with the more organized middle class families who produced children with psychotic disturbances studied by Jackson et al. Minuchin was interested in the structural organization of family systems. Families were classified into two categories, "enmeshed and disengaged on the basis of specific structural characteristics." Analysis of boundaries was central in describing the architecture and process of family systems. Minuchin generally described "enmeshment" as boundary confusion between generations, subsystems, nuclear and extended family. Boundaries defining age and role functionality are ignored, blurred, or confused,
resulting in dysfunctioning in role and developmental deficiencies in children. Disengaged family systems are characterized by the absence of strong connections. Relationship ties between family members are weak or non-existent. Family members act as if in isolated orbits, occasionally bumping into each other and going on their way without being touched or influenced by the other. Enmeshed systems in contrast are characterized by the "tight" interlocking of its members (i.e., when one makes a move all feel it and react). Both types of family systems produce boundary problems which decrease the family's ability to effectively accomplish the tasks of the family (i.e., raising children, and providing support for continuing adult differentiation, etc.). There is pervasive boundary confusion between all generations and shifting coalitions at times of conflict. Thus, stability is rarely achieved even in enmeshed systems and dyadic interaction on any generational level is hampered.

The Research of David Reiss

The research of David Reiss (1971a,b,c) is being highlighted in this discussion of key contributions to family systems theory development. His work was process oriented, holistic and concerned with pattern identification. The behaviors which he used to define effective task resolution in families approximate and conceptualized behaviors for effective marital task resolution used in this study. His
description of "normal" and "balanced" families also resembles the conceptualization of asymptomatic, viable couples used in this study. David Reiss' research (1971a,b,c) builds on the work of Wynne and Singer (1963a,b). He was interested in correlating family interactional patterns with symptomology. Family interactional styles were connected with thinking processes. Reiss developed three categories from his findings; "consensus sensitive," "interpersonal distance-sensitive," and "environment sensitive."
The variables which differentiated families were outcome evaluations of specific areas of functioning during a problem-solving activity (i.e., (1) member's ability to use suggestions from each other, (2) their ability to use cues from the laboratory, (3) their ability to reach closure). The task was designed so that the most effective resolution (in the investigator's opinion) depended upon (1) sufficient sharing of information by all, (2) willingness to join with others, (3) combining their ideas, (4) letting go of individual ideas if not relevant to the group theme supported by consensus agreement, and (5) delaying of closure to facilitate the completion of this process. Although his work was process oriented, it was based on summative judgments of the family's process which enabled categorizing on a health/illness continuum. This continuum was based on a priori judgments about what factors constituted "normal" process and what factors were characteristic
of process which produced potential psychotic disturbance and sociopathic disturbance. He did take a step forward for the time by attempting to define "normal" process not as an absence of illness but as a balance between the components described as the dominant characteristics in each of the two categories (consensus-sensitive and interpersonal distance-sensitive). It represents the broad range of relatively problem free families who are able to resolve problems as they occur without becoming stuck in processes which either inhibit individuation or reinforce uncontrolled and destructive independent behavior. These balanced or asymptomatic families take in information from each other and their environment, share with each other and delay closure until a full negotiation and resolution process has occurred. Their problem solving process reflected freedom from a compulsive need for cohesion as well as an obsessive philosophy of self-reliance. The family boundary was well defined and permeable.

Evolution of Process Models

A brief look at the evolution of several process models in family systems work illustrates the model building process researchers utilize. Attempts to organize family systems on the basis of process variables is demonstrated. The more recent models deal with the concept of change and broader more value-free classifications.
Reiss' "normative" category for family groups approximates the conceptualized pattern presented by this investigation for asymptomatic marital interaction during a problem-solving activity. The key dimension in Reiss' work of interest here was his focus on identifying interactive patterns that went beyond microanalysis of interactional sequences which were usually viewed as disconnected entities. Nor, did he utilize a structural analysis which focuses on organizational attributes. Both models tend toward static descriptions by not incorporating concepts which describe and explain change processes within families. However, his model is static in that the outcome judgment of process describes and classifies the family as belonging to that category indefinitely, regardless of environmental or internal changes which impact upon the system. Reiss' evaluation is connected with the presence or absence of symptomatology to enable final categorization via a health/illness continuum and a consequent bi-polar typology with a "golden mean" of "health = normality."

A process model which builds on the work of David Reiss is one developed by Wertheim (1973). Her three categories; forced homeostasis, consensual homeostasis and induced morphogenesis, followed the trend established in previous research, with two polarized categories dealing with amounts of cohesion and homeostasis and a middle normative category which represents a balance between the
polarized extremes of fusion or detachment. Her model deals with the processes of change by including "fixed positions" on a grid for placement families who have moved from one position to another. However, there is no description of how the changing occurred. Thus, the model is essentially a static representation of the change process (after the change has occurred, positioning may remain fixed indefinitely).

Beavers (1977) cross-sectional model is the first process model which through its concepts and graphic portrayal implies movement from one position to another depending upon various internal and external pressures to change. The model describes a continuum of functioning via three levels of organization (1st level extreme chaos and confusion with poor boundaries and no order or role clarity to a second level which is extremely authoritarian, rigid, tight boundaries, often with confused generational alignments, to a third top level which represents a balance between levels 1 and 2, reflecting flexibility and adaptability). Again this model repeats the trend of two polarized categories, dealing with the dimensions of organization and process which support order, cohesion and balance as well as flexibility, adaptability, and individuation. Beavers uses "centrifugal" to describe "disengaged" orderless systems which are assumed to produce sociopathic behaviors and "centripetal" to describe the "enmeshed" fused systems which
can potentially produce psychotic disturbances. In both systems, communication is confused and incongruent and boundaries are unclear. The continuum perspective allows graduation of the extremes in dysfunctioning. Thus, behavior disorders occur on the "centrifugal" end and neurotic disorders on the "centripetal" side.

Kantor and Lehr's process model (1975) describes open, closed and random structures. This model differs from all previous process models. The health/illness continuum was not utilized for categorizing family systems. Their model conceptualized dysfunction as a flow or temporary deviation from normal process. They categorize families on the basis of the homeostatic structure chosen by the system. This structure could be changed by the system to more effectively meet the changing system needs and individual members. The model has three family types: authoritarian, anarchic, and democratic. Again, the three types follow the previous research model's categorizations. Authoritarian was highly structured, rigid, closed with individual differences subordinate to the group (i.e., "enmeshment," "consensus-sensitive," "undifferentiated ego mass," "centripetal," forced homestasis). The flawed version was extreme rigidity, resulting in system revolution; individuals becoming rebellious and destructive (to others and/or self). The anarchic system (i.e., "disenganged," "interpersonal-distance sensitive," "induced morphogenesis," "chaotic,"
"centrifugal") describes families who highly value individuation and "do your own thing" is prized as a motto. Few rules exist and boundaries are disrespected. The flawed version describes families who become totally chaotic. Individual members may struggle to reestablish some kind of control and develop the polar style of an authoritarian system. Another possible consequence is fragmentation and system dissolution with or without the intervention of community agencies. The democratic system reflects the balance of these dimensions represented by the extreme versions in the two polarized categories. There is order and flexibility. The rights of individuals are respected as well as the group rights. Individual growth and system cohesion are both fostered. This kind of system experiences a lot of stress which is an inherent component of systems which are sensitive to individual needs, and are deeply committed to supporting the life of the system. To actualize both values requires much creative and sustained energy. The goal is to design a system with structure and process which will nourish individual and system growth. The flawed version of this system results in movement toward schism and divorce and/or system stuckness-impasse.

Directions in the Research Literature of the 80s

Some of the most current literature is presented which deals with the issues of system evolution and typology
formulation. The new directions for research and practice have direct meaning for this investigation. The proposed model attempts to operationalize a nonlinear epistomology and concepts dealing with intimate system evolution.

The literature of 1979, 1980 and 1981 (Reiss, 1980; Hoffman, 1981; Elkaim, 1981; Keeney, 1979; Dell, 1980; and Steinglass, 1979, 1980) reflects process models which emphasize movement and change. Systems are conceptualized as moving to and from positions as needs and inputs change. The functional/dysfunctional; health/illness continuum is becoming less accepted as relevant and useful for classification of family systems. Dysfunction is becoming more relevant when understood in relation to each system's idiosyncratic interactional profile. Evaluating dysfunction on the basis of a priori criteria for health/illness established for all potential client systems was the traditional diagnostic method which has dominated the field of psychology. This new thinking reflects a major epistemological shift for assessing human behavior. Elkaim, 1981, utilized a term "family singularity" to describe this concept of family idiosyncrasity. This perspective emphasizes respecting each system's own unique process without labeling or judging the process in terms of health/illness or functional/dysfunctional criteria. This conceptual direction supports the need for constructing a generic paradigm which can describe "what is" without
judgment. Each family has its own interactional data so that the major patterns or profile, at any specific time and place, can be identified by the clinician. This identification becomes the present interactional assessment and guides the intervention construction and intervention process (i.e., the timing and the "how" of application).

Summary Regarding Model Evolution

The past research direction which focuses on the construction of family typologies may not be the most useful direction to pursue in the future. Transactional systemic epistemology is concerned with understanding how systems function as they are now constructed not with judging their functioning with a preconceived set of criteria regarding optimal functioning. A "family singularity" perspective requires interventions focused on system identified problem areas and system agreement on what they want changed and how. Clinicians who work with this conceptual orientation need a generic, value free model which can describe the phenomenological process of each system's unique method and style of "being" in relation to each other.

Theoretical Roots of Proposed Model

Four conceptual areas will be discussed: (1) Systems Theory; (2) Gestalt Psychology; (3) Organismic Self-Regulation Phenomenology; (4) Family Systems Concepts. The meto-theoretical orientation underlying this investigation
is the organismic theoretical model within general systems theory initially articulated by Von Bertalanffy in the 1920s. He introduced a series of concepts that, taken together, formulated an "organismic" theory of life approach to biological problems. Von Bertalanffy attempted to review the prevailing trend in science, at that time, by urging a rejection of total exclusive reliance on the reductionistic/mechanistic approach (Von Bertalanffy, 1968). This organismic theory of life was an attempt to resolve the mechanism-vitalism controversy that divided biologists at that time. This organismic view states that the phenomena of life cannot be resolved into elementary units, but depend upon the interactions among components. The whole of any living being has properties not present in its parts—in isolation from its whole—they are only present in their arrangement in the organized system (Miller, 1965). He, thus argued against reductionistic principles (a linear series of cause and effect equations) and stated that there were more general principles that might be used to explain biological processes that lead to increasing complexity of organization.

**Systems Theory**

In 1945 these concepts were collectively given the title general systems theory (Von Bertalanffy, 1968). Gray, Duhl and Rizzo (1969) date the history of general
systems concepts from Von Bertalanffy's work in the 1930s. One of the early models of systems was the mechanistic model, all variables put together and operating like a clock, all visible and measurable and all acting together in predictable harmony in a pattern of line or causality and homeostasis (Euclid and Newtonian physics). This mechanistic view of life is appropriate for closed systems but biological systems did not fit that pattern, according to Von Bertalanffy, for in the dynamic world of open systems the concept of negentrophy is critical, resulting in dynamic "steady state" not static homeostasis (1968). This process was part of the evolutionary development of the system. He stated in his book Problems of Life, 1952, that it was not only necessary to analyze individual components but it was equally necessary to know the laws of organization that unite these parts to processes. This calls for investigation at all system levels.

Thus, the organismic systems model stresses studying parts of processes in interaction, not in isolation. The organizing relationships which result from this dynamic interaction should be the focus of study. This is based on the systems proposition that states that the behavior of parts is different when studied in isolation than when studied within the whole. This theoretical perspective emphasizes study of dynamic interaction and minimizes study of individual components separate from their interactive
life. The use of pattern recognition versus deductive reasoning is application of the systems perspective for making sense out of the whole. Alfred Kuhn (1980) advocates for pattern recognition as a major area for scientific investigation in the next decade. Beckett (1973) argues that "we must concentrate on concepts interrelationships if we are to discern the seminal thought of general systems and approach any breakthrough in building a better model of grand scheme of reality" (p. 297).

Von Bertalanffy's theoretical ideas were related to similar developments in physics, psychology and philosophy (Miller, 1976b). The Gestalt movement in psychology, first introduced by Von Ehrenfels in 1980 and developed by Koffka in 1935 and Koehler in 1947, analyzes perceptions as wholes rather than summations of perceptual elements. Von Bertalanffy considered Koehler to have introduced the modern systems concept of the organism. Kurt Goldstein (1939), a neurologist, integrated his work with the Gestalt psychologists and introduced the concepts of organismic theory, later added to by Angyal (1965) and much later by A. Maslow (1968). According to Miller (1976b), Von Bertalanffy viewed general systems theory, not as a philosophical position but as a set of hypotheses that could lead to research.
Gestalt Psychology Theory

This theoretical orientation, integrated with the work of Koehler (1947), Lewin (1970), Goldstein (1939), Angyal (1965) and Maslow (1968) and David Reiss (1971a,b,c), provided the theoretical base which generated the hypothesized interactive structure and process to be explored in this study.

W. Koehler (1947) was one of the original researchers and writers in the field of Gestalt psychology. On the basis of his work with phenomenological studies of problem-solving, Kohler concluded that learning is dependent upon perception. The key to learning is the discovery of the right response which is dependent upon the "structuring of the field" or "Gestalt formation." When one has created the Gestalt, one experiences insight: one has increased awareness; one understands. True insight is characterized by the ability to repeat the behavior and apply it to the new situations which are not identical to the original situation in which the learning occurred (Kohler, 1947). Kohler's theory of "insight learning" was in contrast to the "trial and error" learning based on the "law of effect."

Gestalt psychology viewed learnings as a perceptual problem—the discovery of a correct response and this discovery depended upon the appropriate structuring of the perceptual field. The organization of the field is dependent upon the global conditions of which the field is a part and
therefore can be no better than these global conditions permit. This reality can result in confusion and undeveloped structure in the perceptual field. Gestalt psychology introduced the concept the world is not totally an objective process, the perceiving mind contributed organization to external data (Kohler, 1947; Koffka, 1935). Learning situations disturb disequilibrium; tension is evoked; tension is reduced and cognitive equilibrium re-established with the completion of the structuring of the field (the Gestalt figure is clearly formed). The general guiding principle in perception is the "Law of Pragnanz"—the goal-directed tendency to restore cognitive equilibrium after a disequilibrium has occurred in the perceptual field (Kohler).

Lewin and Goldstein extended this theoretical position of perception into the realm of personality. Lewin's basic position became (1) behavior is a function of the existing field (the total co-existing interdependent factors of person and environment) at the moment of behavior and (2) analysis of behavior begins with the situation as a whole, (3) the person in the field can be represented by a mathematical model (Hall and Lindzey, 1970). Thus, Lewin conceives of the person as a part of a dynamic field; any change in a part of the person or parts of that environment is manifested throughout the system. The facts of this dynamic field may be empirical or phenomenal (Hall and Lindzey, 1970). His emphasis is on a tension reduction
model. A need arising in the person increases tension, releases energy, attributes value to objects in the environment and creates activity in the person to meet that need which has emerged and created the tension. The satiation of the need results in tension reduction.

Kohler (1947) discusses the work of one of Lewin's students, Maria Zeigarnik. Her research along with the work of Orsiankina established the phenomenon (Zeigarnik Effect) based on Lewin's tension system hypothesis, that unfinished tasks are remembered better than finished tasks, due to remaining tensions experienced by the person. More recent research has identified the kinds of conditions under which this phenomenon occurs (Woodworth and Scholsberg, 1954). One condition revealed a reverse Zeigarnik Effect—when the subject is fearful of failure, interruption of tasks results in forgetting these and remembering the completed tasks. Orsiankina found, consistent with Zeigarnik's work, that subjects tend to spontaneously resume interrupted activities if they are in a free environment (Kohler, 1947).

K. Goldstein built on Gestalt psychology's study of perception and extended perception to the total organismic involvement in the perception process which then became a study of the whole person (performances-voluntary conscious activities, attitudes-inner experiences and feelings and processes-bodily functions). He stated that behavior could be observed on a concrete-abstract continuum. Goldstein's
position became known as "organismic theory" delineated in his book *The Organism* (1939). Goldstein used three central concepts in his description of how the organism functions: equalization process—tension reduction systems which keep the organism centered or balanced, the processes of "coming to terms with the environment" (processes of getting what one wants in the world) and self-actualization—the central motive of the organism; all of the other drives are parts or expression of the master motive. The creative process of human nature, the unfolding of the person's potential into the realities of the environment (Goldstein, 1939, Hall and Lindzey, 1970). The satisfaction of any specific need becomes figural when it is related to the self-actualization of the organism.

**Organismic Self-Regulation Phenomenology**

Angyal (1965) made several contributions to organismic theory. Of particular interest in the area of interpersonal relationships, are his concepts of "autonomy" and "homony." He states that tension exists between the person and their environment, as an existential fact. This tension may lead to "self-expansion" which includes the integrated, continuing development and differentiation of both "autonomy"—self-determination and "homony"—self-surrender via union with something larger than self. Angyal stresses the continued rhythm of "self-expansion" through stages of self-determination and self-surrender.
A. Maslow (1968) built on the work of Gestalt psychology and organismic theory and became credited with the central development of "humanistic psychology." A basic tenet states that growth comes from within and pathology results from blocking or denial of "man's essential nature" (Maslow, 1968). Full normal development consists of actualizing this essential nature (comprised of needs and capacities).

The research and theoretical positions as briefly described from the base from which the concept of organismic self-regulation evolved (i.e., the figure-ground formation which is strongest at a given time will temporarily take over the control of the total organism until the figure is closed--need met--tension reduced and equilibrium re-established). The organismic self-regulation concept used in the literature of current Gestalt Theory refers to the individual organism (Perls, 1969; Polster and Polster, 1974; Hall, 1976; ZinKer, 1977).

The Marital Couple as the Organismic Unit. The concept of "organismic self-regulation" has been investigated exclusively from an individual organism perspective. Goldstein, Kohler and more recent learning theorists and behaviorists have studied "self-regulation" within an individual-oriented context (Bandura, 1969; Piaget, 1955; Wolpe, 1973; Skinner, 1964). The organismic unit in this study is the marital dyad. The variables of intimacy and
history combine to form a dyadic system which may function differently in dialogic encounter from nonfamily dyads. This notion is supported by the work of Shaw and Sadler, 1965; Sprinkle and Olson, 1978; Steinglass, 1978, 1979; Bowen, 1980; G. Bateson, 1957, 1972.

Organismic self-regulation can be conceptualized as a cycle of behavioral stages involving figure formation and destruction. Zinker, 1978 and Hall, 1977 have conceptualized this process for individual behavior; their conceptualization has not been verified empirically. In this study their conceptualization was applied to marital systems to learn more about couple system organismic regulation.

Gestalt Institute of Cleveland Pilot Study

The Gestalt Institute of Cleveland has completed a pilot research project utilizing this model with two and three person systems. Their methodology, however, differed from the design and procedures used in this study. For example, a standardized task was not used. Couples were instructed to talk about something of interest to them. The time period varied from eight minutes to fifteen minutes. Some of the couples were notified when two minutes remained via a buzzer and consequently used the stimulus to deal with resolution and closure. In the initial pilot exploration with four couples, the time for
the task was more varied (i.e., range seven to fourteen minutes), and a training stimulus was not used to influence the closure process. The Institute's study and this study are different in the following methodological ways: (1) a nonstandardized time (range seven to fourteen minutes); (2) use of one minute segments, as the unit for analysis; (3) the population studied the use of nonstandardized task; (4) variable kinds of dyads (i.e., nonmarital); (5) interference in the phenomenological process (via the notifying the couples with a buzzer when two minutes remained); (6) the instructions to the couples regarding their responsibility for finishing the task. The observational instrument utilized in their exploration of this study was similar.

Coding procedures involved the use of four to six observers who viewed the tape concurrently. Inter-observer agreement was computed between the entire group of observers. They analyzed agreement/disagreement by looking at the range of observations coded within each unit of analysis (one minute). They reported the range by identifying (consensus, contiguous and ambivalent ratings). One measure of inter-observer was utilized versus four measures employed in this study. Unfortunately, the Institute's research report is in draft form and not yet available for review.
In summary, data were collected to answer questions regarding the relevancy of this conceptual model for accurately describing interactive patterns in couples who appear to have developed ability in effective system organismic regulation. This effectiveness is defined as a lack of severe, long term emotional symptomology. Organismic self-regulation refers here to couple functioning, on their own, without input from their environment. Their processes of dealing with each other during a problem-solving activity was observed without interruption and/or guidance from the investigator. Thus, their phenomenological process of figure development or resolution as a couple system was demonstrated.

Family Systems—Differentiation and Fusion

A key theoretical contribution to interactional theory comes from the work of family research focused on the concepts of differentiation and fusion within intimate relationships. This topic requires in-depth treatment and is, thus, beyond the scope of this investigation. The ideas must be identified and referenced even at the risk of being superficial as they are central to any examination of an intimate relationship. The measuring instrument operationalizes these concepts to allow some measure of these phenomena in the marital interaction.
The literature in the family therapy field reflects conceptualized attempts to define and describe the differentiation and cohesiveness in family (Bowen, 1978; Boszormeyi-Nagy, 1965; Fogarty, 1974; Minuchin, 1974; Satir, 1964; Perls, 1969). Symptomatic marital dyads are more likely to display extreme interpersonal enmeshment—fusion and/or extreme disengagement distance (Olsen et al., 1979; Minuchin, 1974). Boszormeyi-Nagy, 1967, theorizes that a successful dialogic relationship is each partner's sensitivity to the other's needs and a willingness on the part of each partner to offer him/herself temporarily as an object for the self-delineation of the other. "Since offering oneself as an object to the other amounts to 'giving', the act of mutually trusting the other is an important structured requisite of the dialogue. The trust, i.e., the anticipated reciprocation on the part of the other, removes the emotional flavor of being used to taken advantage of" (pp. 56-57). The form of this mutual trusting transactionally is a constant alteration of subject and object roles between partners. "The structure of dialogue is not based on a constant complementation of needs. Instead it is a contract for the free exchange of both partners' noncomplimentary need assertions, based on their reliance on the overall mutuality of each others object availability" (p. 77). Accordingly, this relational structure (dialogue) is proposed as highly conducive to
both partner's continuing growth. System theorists and family systems theorists and clinicians are in consensus that mature adult development is characterized by increasing individuation and by the formation of close differentiated relationships. Mature, actualizing relationships are proposed to contain the elements and interrelationships as described by Boszormenyi-Nagy in dialogic relationships and a dyad figure ground process which is effective in meeting the needs of the individuals within the dyadic system for continuing differentiation. Buber, 1965, states, "in order to be able to go out to the other, you must have the starting place, you must have been, you must be with yourself" (p. 21). In his I and Thou, 1958, "Every real relation in the world rests on individuation..." (p. 99). In the most mature intimacy, the individuality of the other is recognized, confirmed and enhanced; in fusion, these realities are ignored, denied and/or diminished (Buber, 1958).

**Summary**

The research direction for the past ten years has been focused on understanding, describing and defining the interactional process which supports a balance and constitutes extremes in individuation and system cohesiveness. The balance between these dimensions has repeatably been theorized as the "normal" viable type of family structure.
and process. This investigation builds on the research direction specified above and moves beyond that focus. A key interest in this study is to learn more about the phenomenological dyadic process which characterizes couples who are not currently experiencing a marital crisis, and/or long term emotional symptomology. The focus in this investigation differs significantly from the process-oriented research reviewed in this chapter. As discussed, most process studies have looked at outcome measures which focused on specific variables of interest to that investigation. These investigations led to judgments regarding the family's process and consequent placement on grids or continuums revealing the family's level or amount of the specific variable. The findings from these studies produced data which created typologies of family process, utilizing the concepts of "normality" and "deviancy" for the orienting, conceptual context.

This research project was conceptually oriented by phenomenological systems concepts which do not contain judgments about the level or amounts of "normality" in occurring phenomena. The objective in this study was to study "what is" and to be able to describe reliably and with some validity the diverse interactional patterns which do exist in the wide group of asymptomatic marital systems. Thus, the conceptual base supports the research questions and methodology utilized to gather and analyze the data.
The literature revealed a significant gap in knowledge about the dominant majority of marital relationships who function without getting stuck in dysfunctional processes and structure long enough to create debilitating symptomology in system members. These asymptomatic systems experience problems and stress and deal with these issues in ways which result in satisfying experiences for system members. Growth is promoted and serious individual impairment is prevented. Social scientists and practitioners do not have sufficient information regarding the kinds of processes and structures utilized by these successful family systems to create their viable, nourishing relationships systems. Part of the new perspective in this interactional field of research and practice includes the premise that these viable systems at times experience more stress than they can effectively deal with alone and, consequently, reach out for professional assistance for a period of time to help them get "unstuck."

The systems awareness of its strengths and vulnerabilities; its capacity to reach out and effectively utilize resources to facilitate satisfying growth-enhancing experiences for its members, constitutes criteria of system viability - not system fragility or impairment. Clinicians need to understand and be effective with these families who do not fit into extreme clinical categories. Thus, a nonlinear systems model is needed which can be utilized
with this large population group. Such a model would facilitate identification of each couple's unique interactional style (i.e., pattern recognition which is value free). The methodological design in this study attempts to generate the data which is needed to proceed with this model development.

The exploratory design is congruent with the research questions and the early stage of theory and model development in this subject. Information was needed regarding viable asymptomatic marital interaction in order to formulate hypotheses for future verification and potential descriptive and experimental research. The model has not tested beyond a pilot study conducted by the Gestalt Institute of Cleveland (see p. 51). Thus, reliability examination is a first research priority. After acceptable reliability has been established in this study, further research with the instrument could employ a more stringent design. Descriptive research could be implemented as well as experimental designs which would look at before and after measures (i.e., impact of clinical work). The instrument may require additional development and refinement before it can be utilized with adequate confidence in a more controllable design.
CHAPTER III

METHODOLOGY

Introduction

The major research objectives in this study were to (1) obtain information which would address the gap in our knowledge about the phenomenological structure and process of viable marital interaction and (2) to develop and test a nonlinear systems model for clinical application with marital systems. The subdimensions of these major research goals are expressed in the following questions:

1. What are the verbal and nonverbal behaviors in asymptomatic marital interaction during a problem solving encounter?

2. Is there an identifiable temporal structure which offers some ordering of behaviors within the process?

3. Are patterns observable in the data regarding behaviors clustering during specified time periods within the process?

4. Can the measuring instrument (category system) demonstrate acceptable reliability percentages?

5. Are the behavioral indicators used in the category system to define conceptualized interaction process useful, understandable, reflective of empirical reality?

6. Does the conceptualized interactive process as operationalized in the category system reflect, describe with any accuracy the empirical phenomenological process being observed?
In summary, data are needed to learn about what behaviors occur and how they are connected spatially and temporally as spouses deal with each other in the present on a common issue.

What is being suggested in this study is the potential value in developing a paradigm which offers a vocabulary and an order for describing the phenomenological components of marital interaction. The paradigm would describe the components (their processes and structure). This would provide a profile of "what is" without assessing characteristics related to "normality" or "deviancy." A model has been developed in an attempt to meet these needs. It is a hypothesized conceptualization of what behaviors might occur and how they might be organized in viable marital interactions. This hypothesized cyclical structure involving behavioral stages and behavioral indicators for each stage evolved from theoretical premises and clinical experience. This research is designed to provide empirical information to either support or refute its relevancy and usefulness in clinical work.

The methodology utilized in this study was developed in an effort to design and test a new nonlinear, judgment free model for describing marital interaction without outcome evaluations of process variables. Analysis of past interactional research revealed the clear dominance of outcome oriented process research which utilizes variables
considered by the investigator as critical in determining system functioning. Differentiating family systems has resulted in the development of typologies oriented conceptually by a functional/dysfunctional paradigm. The health/illness, normality/deviancy epistemology has dominated research and practice in this field. It is now being questioned as the most useful direction for research now and in the future (Hoffman, 1981; Keeney, 1979; Dell, 1981; Reiss, 1980).

This chapter is organized around the components of methodological design used to implement the research. It begins with an overview of the basic research design and rationale for design choice. The primary design technology is described. Following the discussion of design and basic methodology utilized, the population sample is described along with the sampling procedures utilized to obtain the population.

The instrumentation is presented next with the rationale supporting this choice of measurement. The specific technological components utilized to implement the data collection are described (i.e., observational category system, video taping, use of tasks to generate interactional data, observer selection, training, and, finally, the coding activity).
Research Design - Overview

A research design is the organizational format created to obtain and analyze data which will be most relevant to the goals of the research. The goals of this research were to obtain information about a specific phenomenon (i.e., viable marital interaction) to enable the formulation of hypotheses for continued knowledge building regarding viable marital interaction. The major purposes in this research were to gain new ideas and insights regarding dialogic encounter and a useful conceptual framework for organizing the observed interaction. Therefore, the research design needed to be flexible to obtain a wide variety of data to emerge and be recorded. These research purposes guided the selection of an exploratory design.

According to Seltiz et al. (1976), exploratory designs are the appropriate design choice when the investigation seeks to obtain information which will enable precise problem formulation and/or development of hypotheses for future examination. In general, exploratory design is the most relevant and efficient for increasing familiarity with a specific phenomenon and/or setting or instrument; as well as clarifying concepts and establishing priorities for further research. These criteria support the use of an exploratory design for this research project. The lack of previous research investigating this phenomenon and the newly created, untested instrumentation were the central
issues formulating the rationale for the use of exploratory methodology.

The study utilized systematic observational methodology. Weick (1968) points out that "the problem of designating what is meant by a 'systematic observation method' is sizable because the term is so inclusive" (p. 358). With this precaution, he defines it as "planned methodical watching that involves constraints to improve accuracy" (p. 358). Weick states that "any technique that serves to improve that skill of observation qualifies as an observational method" (p. 358). Thus, the construction of a category system, observer training and video tape technology are observational methods utilized in this study to collect data.

The rationale for observational methodology which employs a behavioral instrument (i.e., category system for coding observations) versus utilizing self-report methodology is based on the need verified in the research literature for methodology which can obtain accurate interactional data concerning intimate relationships (Kent and Foster, 1977; Olson, 1969, 1977; Straus, 1964, 1973; Haley, 1972; Levinger, 1963; Olson and Rabunsky, 1972, Turk and Bell, 1972). Kent and Foster (1977) state that "the behavioral approach, with its empirical and methodological commitment for reliable information, could be
highly useful in defining criteria for evaluating relationships as complex as marriages" (p. 592).

The review of research literature concerning family and marital interaction revealed a heavy reliance on self-report methods and a small percentage which utilized observational measures of marital and family behavior. Raush et al. (1974) and Hicks and Platt (1970) observed that there is almost no research in the area of marital success on which behavioral methods were employed. Straus (1973) strongly advocates the use of direct observational laboratory studies for study of family process, as the desirable method, "particularly well suited to systems theory research." He draws a similarity between longitudinal studies and laboratory direct observational studies, calling the latter "mini-longitudinal" as they allow study of systems "over-time" as they cycle through their entire process. He states that laboratory studies constitute only a small percentage of family research and that this is unfortunate, as direct observation of family process is particularly well suited to systems theory based research" (p. 120). Self-report data, in comparison is devalued as appropriate methodology. Murphy and Mendelson's study (1973) comparing observation of live communication between married spouses with self-reporting of their communication process supports the conclusion that observing live communication is a more valid and reliable method for study of a
couple's communication process. Jacob (1975) states "that given our present knowledge regarding the lack of congruence between reported and actual behavior (as well as systems's theory contention that knowledge of an individual member may not accurately predict that member's behavior in interaction with other system members) it would appear that the assumptions underlying self-report methods are questionable at least and untenable at worst" (p. 33). Olson (1977) concludes that "the time is ripe for use of behavioral methods (observational studies) to describe interpersonal relationships. . ." (p. 132). He advocates their use to enable focusing on a wider range of relevant variables and questions than have been studied to date. "Too little past research has dealt with meaningful questions of how relationships are developed, maintained and improved, or how they change over time" (p. 132).

Research Sample

This study is limited to the marital system, a critical subsystem within the family unit. In the 80 studies reviewed by Doane (1978), the marital relationship emerged as the critical variable to consider in future family research. Doane concludes that more attention should be paid to the impact the couple has on the family system. According to Virginia Satir (1964), "the parents are the architects of the family and the marriage relationship is the key to all other family relationships" (p. 1).
The research objective was to obtain information about viable, asymptomatic marital interaction. This led to the search for a selection of couples who had, (1) no identified diagnoses of emotional disturbance (conferred by a professional and/or by friends, family or self), (2) were not experiencing a marital crisis at this time, (3) had been married a minimum of two years, (4) were in a broad age range (twenties through fifties) and (5) were choosing to spend time and energy in a "growth" oriented activity (i.e., a couples group experience designed to improve and/or enrich their marital relationship. (This activity would focus on maintaining and improving individual and couple emotional health. It would not be "therapy" oriented; i.e., dealing with identified problem issues; rather, the emphasis would be on education and facilitation of communication, attitudes and behavior which create and support nourishing and satisfying interpersonal experiences.)

Since the research purpose was to gain more familiarity with a specific phenomenon (i.e., viable, asymptomatic marital interaction), the sampling procedure utilized purposive (nonrandom) methodology. This methodology is congruent with an exploratory research design. The identification of important variables connected to the phenomenon is achieved by studying a population which best exemplifies the phenomenon of interest. When the key variables can be selected, theoretical questions can be formulated for more
precise empirical work later.

The research population was obtained from the Family Life Ministry of the First Community Church, 1800 Cambridge Blvd., Columbus, Ohio. This interdenominational church is located in a middle class suburb of the city and generally serves a large middle income, caucasian population. The education level is above average. The family life ministry is a specialized program within the church with its own ministerial leadership. It functions in an educative, consultative and counseling capacity to meet the needs of families, single, divorced, and the elderly church members who identify their concerns within a family context.

This program offers a diversified range of counseling and consultative services, educational opportunities, emotional/behavioral growth oriented experiences and social activities focused on family connectedness for all "attached and unattached" people.

One of the well established programs within this ministry is the "couples circle group" organization. Couples volunteer to participate in this activity. It involves monthly meetings which generally focus on improving the quality of family life through educationally oriented group discussions, and community sharing of ideas and feelings. Couples are offered opportunities for learning about effective interpersonal communication, increasing their awareness of themselves and others and adding new ideas and
behavior to their present functioning styles. These growth oriented activities generally support a self actualizing perspective within a family context. Specifically, the goal is increased marital system viability in meeting the spouses needs, as each continues to grow and change with time and new experiences. The family life ministry programs are based on a conceptual orientation which describes "growth" operating on two system levels, simultaneously, the individual and the couple. Individual growth is viewed as a prerequisite for marital systems.

**Sampling Procedures**

The population universe for this study consisted of 212 couples, comprising 23 couples' groups in the church circle group program. This represented all but five groups in the church program who were not included due to an inactive status or an average age of 65 or older. Although age was not a criterion for selection, it was decided that a broad age range would generate a maximum amount of variation in data which was the objective in this exploratory research. The groups ranged in age from mid 20s to early 70s. Groups were organized to be somewhat homogeneous. Thus the age range within each group was approximately 10 years.

A letter briefly explaining the research project, with an invitation to participate as a research subject, was sent to the 212 couples by the minister (copy of letter in
Appendix). Telephone calls were made by the investigator to those couples who had been contacted initially by letter. Telephone calls were made in a sequential order after a random selection of a group was chosen from the group of 23. The purpose of the telephone contact was to engage the couple's interest in the project, provide additional information if requested and schedule a time with them for video taping. These contacts generated a population sample consisting of 30 couples who met the research criteria of viable, asymptomatic. Their age range was 31-74.

The median age for the wives was 40.5 and the median for the husbands was 45. Due to one couple who were both 74, the age ranged from 31-74, with the mid 30s as the mode for the men and women. The median number of years married was 14.5; 2.3 was the median number of children. Three of the couples in the sample were childless. The median age for children was 13.5 with four years old as the mode. Due to several couples at the older end of the age range with children in their 20s and one couple with five children in their 40s, the age range was 43 years and the mean age 16.5. This represents a skewed age span as the largest number of children were pre-school or adolescents.

Four of the wives and five of the husbands had had previous marriages. Twenty of the wives were presently employed outside of the home, 11 in full-time positions. The median number of years for involvement in the church
circle group was 5.7. These data reflect some indicators of couple stability and commitment to and involvement with community life. The couples were asked to complete a questionnaire requesting demographic data and evaluative feedback regarding the research experience and methodology. Twenty-nine of the 30 questionnaires were returned with 25 volunteering evaluative comments. The questionnaires were anonymous and considered confidential. Fifteen of the 25 described the research experience as a very positive personal experience; four evaluated the methodology in positive terms and three were critical; three evaluated the research in relation to its overall issues and were very positive about its underlying purposes.

Summary of Couple Demographics

The demographic data on the research population reveal some interesting information: Couple stability, wives employed outside of the home, number of children similar to the national average, community involvement and commitment to education for self and others were the dominant characteristics reflected in these data.

The median age for both spouses was skewed by the large range (31-74). The dominant age group were in their mid 30s. The children were primarily pre-school or young adults. The couples demonstrated enthusiasm, commitment and very positive feelings about the research and their participation.
These characteristics appear to be congruent with most ideas about what viable asymptomatic couples would be like. They demonstrated: positiveness, high energy, interest in learning for self and support of other's learning, ability to risk, couple flexibility (wives working, role switching), stability (long, first marriages), sense of humor (comments to investigator and with each other), comfort with disagreement and individuality (separate and differing ideas on tapes and questionnaires). These characteristics are congruent with the descriptions of "healthy, actualized individuals" described by Maslow and family researchers who have studied "healthy, actualizing," viable family systems (Olson, 1979, 1980; Barnhill, 1979; Maslow, 1964, 1977; Hoffman, 1981; Beavers and Lewis, 1976; Bowen, 1978; Haley, 1977; Boszormenyi-Nagy, 1967).

Observers

Eight observers were selected from a group of fifteen graduate students who responded to a written announcement posted in the College of Social Work office. It offered an opportunity to participate in a research project and receive independent study credit. The three hours could be applied in the research and/or clinical sequences as elective credit. First year graduate students in the Master of Social Work Program at the Ohio State University were invited to apply for this research experience. Due to the time of year, it was not feasible to involve second year
graduate students. The project schedule required their involvement during the summer quarter. The second year graduate students would be graduating in June and obviously not available. Interviews were conducted with the students to aid the selection process. The criteria for selection included: (1) a minimum of two years of Social Work experience in the direct practice role, versus experience primarily in research, community organization, administration or planning roles, (2) a major interest in clinical social work practice, and (3) some previous experience professionally or personally in interpersonal communication work.

The mean and median age of the observers was 34. Three were married, three divorced and two had not been married. None had previous course work in family theory, therapy, systems theory or communication theory to supplement the course offerings within the core curriculum of the MSW I program. All but one had some personal experience in interpersonal communication work. All met the criteria for previous social work experience and all were currently working in a social work position or involved in a field work experience. All were majoring in the clinical practice area and the mean and median point hour was 3.5.

The personal backgrounds of the observers were varied, as were their work experiences and social work experiences. They were similar in their lack of academic and professional experience in family systems theory and practice. In this
respect, they all started from the same academic and experience base. Training was designed to provide some uniform understanding of the conceptual background of the research.

The research literature emphasizes the importance of training in calibrating observer's coding and minimizing the importance of personality and/or previous background experiences (Weiss and Margolin, 1977). This research supports this previous finding (i.e., training is a more important variable in obtaining acceptable inter-observer agreement than the individual personalities and backgrounds of the observers. Engel (1975) found that inter-observer agreement was due to training and/or coding rules, not to the individual or pair dynamics. Researchers agree that problems in coding or achieving inter-observer agreement must be dealt with by improving the instrument's coding procedures and/or training, not by replacing observers (Weiss and Margolin, 1977; Kent and Foster, 1977).

Category System

Systematic observational methodology relies on the use of category systems for recording and grouping observations. Categorization enables observation to be summarized and differentiated. Categorization reduces complex data, allowing comparison of differences and similarities in a wide spectrum of behavior. Category systems allow the testing of hypotheses regarding the presence or absence of specific
interactional processes and sequences. Categories are generally exhaustive of the type of behavior that is recorded. They are derived from theory; they are recorded rapidly with little observer strain and they focus on selected behaviors (Weick, 1968).

The development of a category system can be derived from two approaches; rational and empirical (Straus, 1964). The rational approach begins with a conceptual definition then specifies the components of the definition, followed by selection of behavioral indicators, construction of an index and concludes with standardizing and validating the resulting instrument. The category system designed for this investigation fits with the rational approach. The research starts with theoretical constructs regarding a potential paradigm for marital interaction and seeks to empirically validate the concepts which constitute this paradigm. This approach was chosen as the investigator was interested in operationalizing and empirically validating a specific conceptualization of interactive process derived from theoretical premises and clinical experience.

There are few category systems described in the family interactional research literature. The Interactive Process Analysis developed by Bales was one of the first instruments created to record observed interactive behavior. Bales was interested in group leadership and studied numerous laboratory groups in order to identify styles of leadership skill.
The scale consisted of 12 categories designed to define instrumental and positive versus negative expressive behavior. Winters and Ferreira (1967) and Waxler and Mishler (1966) used it to study ingredients of family decision making and found the instrument's use to resulted in low inter-observer reliability when used with family groups. Many researchers dispute this system's reliability and validity when applied to family systems (Framo, 1972). It is one of the best known and useful methods for studying nonintimate group interactional behavior. However, its categories do not reflect the wide variety and fine distinctions of interactional behavior which occurs in intimate system interaction (Lennard, 1972; Haley, 1972). The Bales system is a good example of an extensive system. An extensive system is typified by broad, general descriptions. The extensive system is able to capture many more events but provides a less thorough record of those events. The intensive system concentrates on finely defined details to the exclusion of many other aspects of behavior. The Bales system provides a record of the broad interactional process but excludes nonverbal behavior and some of the subtle emotionality in the interactive process of intimates dealing with one another.

Classification requires decision as to how to slice human behavior sequences into units for analysis. The system should evolve from the theoretical premises guiding
the study. For example, the category system utilized in this study focuses on complex interactional sequences contained in a two minute time frame versus analysis of smaller units (i.e., statements, small unit of body movement, one dyadic interchange, etc.). Category construction is guided by clear definitions of the research questions and theoretical constructs which one seeks to empirically validate. This study focuses on analysis of process variables within marital interaction during a problem-solving activity.

The following figure illustrates the system used in this study. The conceptual categories are identified by five constructs: Awareness, Energy/Action, Contact, Resolution and Withdrawal. Each category is defined by the behavioral indicators listed below each concept. The sixth category "Other" was included to learn about the presence of behaviors not represented by the five defined categories. What is not shown is the coding space for each category in two minute segments. (See Appendix, p. 200, for narrative definitions of conceptual categories.)

The criteria used to guide category construction basically stems from explicitness (i.e., behavioral language describing behavioral cues). This instrument is extensive due to its broad categories which allow a wide range of behavior versus an intensive system which concentrates on finely derived details to the exclusion of many other aspects of behavior (Crano and Brewer, 1973). It contains
AWARENESS (The sharing of individual ideas and feelings with another; putting data from self into couple system—going public with one's private experiences)

1. Information shared without being asked
2. Information given in response to questions
3. Questions asked

ENERGY/ACTION (The demonstration of individual interest in one's own ideas or other's ideas and attempts to sell and/or join with other on ideas expressed)

1. The use of energy to reach across to join with another, getting the other person to be in the same place as you. Behavioral indication that someone is interested in something; i.e., through gestures, voice quality, interest words, posturing evidence of arousal, before joining occurs.
2. Behavioral attempts to mobilize another's energy and interest; i.e., "Let's...." "How about we...." "Why don't we...."
3. Behavioral indications of willingness to join with another.

CONTACT (The demonstration of mutual interest in a common, bounded figure)

1. Behavioral indications that joining, unanimity, like-mindedness occurs; i.e., "Okay, we...." "We are...."
2. Indications of understanding (agreement is not necessary)
3. Being in sync with another

RESOLUTION Behaviors which: (The demonstration of finishing and closure on a theme of mutual interest)

1. Tests for finishing
2. Behavioral attempts to "round off" any sharp edges remaining to the experience
3. Reflections, summarizations, or other attempts to "Own" the content or experience.
4. Celebration or mourning the experience
5. Attempts to use up, dissipate leftover energy

WITHDRAWAL (The resting time, after letting go of the focused, energized encounter; the demonstration of space between spouses; silent pre-occupation with self)

1. Reduction of energy so that the experience can fade
2. Pausing, falling into silence

OTHER

1.
2.
3.

Figure 1. Conceptual Categories with Corresponding behavioral Indicators.
indicators to record nonverbal behavior as well as feelings and subtle emotional responses. It includes indicators which reflect sequences couples might use, due to their familiarity with each other (i.e., "in sync" in the contact category, celebration, and mourning in the resolution category, and silences in the withdrawal category). The categories are not mutually exclusive. The exploratory nature of this investigation required behavioral indicators which were flexible and broad enough to capture wide variances in behavior. Thus, the boundaries of the categories are flexible and permeable. Exploratory research is concerned with becoming familiar with a specific phenomenon, thus, the instrument should facilitate recording the complete behavioral repertoire observed within the conceptualized category. This identification and selection of relevant variables enables the development of relevant, precise conceptual definitions to support empirical work in the future which can be more focused and controlled. The system attempts to be exhaustive by the inclusion of an "other" category.

Systems of categories vary in number. According to Weich, "large numbers of categories do not necessarily mean that a system is reliable or valid" (p. 424). With large numbers of categories finer distinctions often exist and the observer's decision on coding specific items may be more difficult. Medley and Mitzel (1963, p. 300) recommend that no more than 10 categories be used. Raush et al.
(1974) started their exploratory investigation of interpersonal conflict with 36 categories, reduced it to 12, then 6 during the process of their study. This was done to obtain suitable inter-observer reliability percentages to enable the establishment of certain relationships between data, not possible in a more micro, intensive category system. This system in this research utilized six categories: Awareness, Energy/Action, Contact, Resolution, Withdrawal, Other. The reliability of categories is addressed by Gellert (1955) "the fewer the categories the more precise their definition and the less inference required in making classifications; the greater will be the reliability of data" (p. 194). An effort was made to reduce the decision-making "burden" in coding by using a smaller number of extensive molar categories which ask for present/absent sequential coding of behaviors. The number of categories is also congruent with the theoretical premises guiding the study. The behavioral indicators describe overt behaviors which attempt to define the concepts which label the categories. Selltiz et al. (1976) describe this type of category system as the "molar approach" as compared to the "molecular approach" which entails the use of smaller units of behavior. There is some risk according to Selltiz in lowering reliability with the molar approach. However, other researchers argue the molecular approach which demands finer distinctions to coding places too much burden on the
observer and thereby decreases reliability. It seems clear that there is no standardized list of behaviors, actions or situations, or size of unit established for observational research. "The size of the unit is in part determined by the variables studied and in part by the values and orientations of the investigator" (Selltiz, et al., 1976, p. 283). At this point in time, according to Selltiz (1976), Weick (1968) and Kent and Foster (1977), observational research has no standardized measuring instruments. Despite the increasing number of observation studies in recent years, some fundamental questions are unresolved and each investigator tends to develop their own methods (Raush et al., 1974).

The category system shown on p. 77, contains the behavioral indicators for each conceptual stage of the interactive process. It graphically illustrates their sequential structure. This structure allows a functional analysis. The behavioral indicators listed within each stage define that conceptual state and explain the function or purpose of that stage. The hypothesized structure is cyclical and hierarchial in nature, utilizing an epigenetic principle (i.e., each state is experienced fully to enable satisfactory use of the succeeding stage). This organization of the marital couple's phenomenological process during a problem-solving encounter represents a conceptualization which requires empirical examination. The category system
represents an attempt to behaviorally operationalize this conceptualization to enable the empirical investigation.

Videotaping

Systematic observational methodology is relatively new in development, specifically, in its use of alternatives to direct in vivo methods. Kent and Foster (1977) discuss the advantage of video tape recordings in comparison with in vivo observation and generally support their research utility for a variety of reasons: (1) video tape recordings provide unobtrusive records of on-going behavior and facilitate the reliability and assessment of observational data, (2) prevention of "instrument decay" by collecting all the data on tapes then presenting the tapes to observers in random or a counter balanced sequence. The use of the behavioral code can be limited to a short period of time to decrease the probability of "observer drift," a phenomenon more likely to occur when the time for coding is extended. (3) Video tape recordings can provide the basis for a variety of methodological evaluations and observational recording procedures. An additional advantage of video tapes is concealing the observer from those whose behavior is being recorded. Elimination of distractions or interactive effects between the observer and the observed is achieved. It is conceivable that the use of video tapes to record and store data could produce a potential tape library
established in research centers enabling utilization by investigators throughout the country.

Video tape technology was utilized in this study to record couples' interaction process as they focused on a problem-solving task. The recordings were observed and coded by trained observers who classified behaviors according to a behavioral category system (see Appendix B). The tapes were made during two weekends. Two days were scheduled for eight hours of filming and two days for four and a half hours. This schedule was necessary to make maximum use of the video equipment and the setting provided by the church and the couples' schedules.

Pilot Study

A pilot study was done two weeks prior to the date for filming the research population. It was decided that a pretest would be valuable (1) to refine, clarify, and standardize the instructions to the couples, (2) to prepare and modify the video equipment (lighting and use of microphones), (3) to arrange the setting for maximum comfort and minimum distractions created by camera equipment. Two couples from the church membership volunteered to participate in this pretest. Two couples provided the needed information regarding the tasks used to generate interactional data and the instructions to the couples. They also provided sufficient feedback regarding equipment usage and setting design, as well as the timing for all procedures.
Six hours were utilized in this pretest to obtain the information needed for implementing the research investigation as smoothly and reliably as possible.

The video equipment was loaned from the Ohio State University learning resources department. A camera person was hired to operate the equipment while the investigator monitored the timing process, gave the instructions to the couples and coordinated the project with the church staff. (120 min. VHS, 1/2" cassetts were utilized.) Consent forms were signed by the couples before the filming.

Tasks Utilized to Stimulate Interactional Data

The tasks selected for this study were "Plan Something Together" (Task A, Appendix, p. 184) and "Decide How You Would Spend a $3,000 Gift to the Two of You" (Task B, Appendix, p. 184). Each couple was given both tasks in A, B sequence with a 10 minute time period for each task.

The "Plan Something Together" task asked the couple to talk with each other about an activity which they would like to do as a couple. The instructions included the investigator's request that the activity be something that they might actually do together at some time as a couple and/or family rather than a fantasy or dream trip. They were informed that they had ten minutes to discuss this issue and that they did not have to agree or finish their discussion within this time period. They were instructed
to use the time however they wished, that there were no right or wrong ways to deal with this problem or task. An atmosphere of acceptance for whatever they did was promoted by the investigator. The investigator took the major responsibility for timing the interaction although a clock was made available to the couples if they wished to pace their discussion within the 10 minute context.

The second task, "How Would You Spend a $3,000 Gift to the Two of You" (given to you as a couples' gift) was implemented exactly like the initial task. The instructions with this task added the request that the gift money had to be spent in ways other than "savings" or investments approximating "savings." This stipulation was included based on previous research using this task (Kenkle, 1962).

The criteria for task selection were (1) the capacity to elicit data which would attempt to answer the research questions (2) the congruence with theoretical premises guiding the study, (3) a standardized stimulus to allow reliable measurement. The tasks allowed for individual expression within the couple system context and the negotiation, development and resolution of the couple system's emergent themes. The "Plan Something Together Task" was used in previous researches (Terrill and Terrill, 1965; Leighton et al., 1971; Riskin and Faunce, 1972; Murrell and Stachowiak, 1967). The spending money task was utilized by Kenkle (1963). Their previous use in family research
supported their selection for this investigation.

Review of relevant instruments used to measure a variety of interactional variables via observation of family interactional process revealed the following data:

Tasks generating interactional data: The assignment of a family (or dyadic) task is a commonly used technique serving as a stimulus for interaction which can then be observed and coded according to specific scales and category systems developed by the investigatory and/or previous research. Riskin and Faunce (1972), Watzalwick (1966), Stachowiak (1968) and Lewis et al. (1971) used a type of "Plan Something Together" task for research and therapeutic objectives. This study was focused to study the phenomenological process of interaction (i.e., the uninterrupted, nondirected or manipulated verbal interaction used by the couple). Stimulating differences, agreements, conflicts, competition, flexibility, cohesiveness or whatever specific variables of interest to the investigator was not the objective in this study. The objective was to look at "what is" rather than one identified process variable. Thus, the tasks were chosen on the basis of their past ability in previous research to generate phenomenological data, which is as nearly as possible reflects the couple's natural way of interacting as they deal with each other on a rather nonemotionally charged topic.
Some tasks are explicitly designed to generate verbally-expressed differences. For example, the Revealed Difference Technique developed by Strodbeck (1951). A related approach is the Unrevealed Difference Questionnaire designed by Ferreira and Winter (1965) and also used by Haley (1967b). Olson and Ryder (1970) introduced an Inventory of Marital Conflicts. These measures may also be used as outcome measures. This objective was not congruent with this study's purpose.

Projective techniques and other personality measurements have been adapted for interactional use. For example, Wynne and Singer (1963, 1968) used the Rorschach to stimulate transactions between subject and tester. Loveland (1967) used this "relation" and projective technique for studying interaction and Glasser (1976) used it to successfully differentiate symptomatic and asymptomatic family systems. The TAT was used by Winter et al. (1965), O'Rourke (1963) and Friedman (1969) and a modified form by Minuchin (1967). These tasks require outside direction by the investigator and thus the interactive process includes the researcher. The process being measured represents the reaction to specific questions and images not the phenomenological process of the subject by itself.

Game-playing tasks (SIMFAM) introduced by Sprinkle and Olson (1978) to measure couples' interaction on specific
variables of interest to those researchers (cohesion and flexibility).

A common characteristic of all of these tasks is the standardization of the content. The themes and issues discussed are generally connected to the stimulus created by the task (i.e., plan an activity, spend "X" amount of money, react to this conflict situation, look at this picture and tell a story, etc.). The content-stimulus of the given task is presumably the same for all subjects. A more idiosyncratic approach—designing content to family, raises problems with making meaningful comparisons across families. Zuckerman and Jacob (1979) studied the effect of different experimental tasks on emergent patterns of family activity, conflict, and influence and found marked consistency in family interaction across experimental tasks. They concluded that the "observed patterns of interaction accurately reflect reality and that family interaction is very stable and consistent over different contexts" (p. 52). Various studies have reported stable interactions over tasks: Jacob and Davis (1973), Murrell and Stachowiak (1967), and over time Alexander (1973), Ferreira and Winter (1966b), Levinger (1963). The above findings generally support the use of tasks in laboratory settings to generate interactional data which is representative of the family or couples' interactive process.
The potential reactivity of a laboratory environment with structured tasks and video equipment does not appear to be a serious methodological limitation for generating potentially valid data, according to previous research in this area. The issue of obtaining valid interactional data from families outside their private home environment concerns all researchers in this area. Some have utilized methodology in the subjects' home environment (Steinglass, 1979). O'Rourke (1963) compared the "field and laboratory" settings on family group decision making behavior. He found some behavioral differences. Research following this study has minimized the differences by explaining the laboratory effect as similar to a new environment experienced by families whenever they are outside their home. Their interactive behavior, although different from home behavior, is an actual representation of their behavior when dealing with each other outside their homes and thus is valid and as much a part of their interactive life as their home interactive behavior. Many researchers explain this finding in relation to the concepts of homeostasis and general redundancy of interactive sequences in family systems (Zuckerman and Jacob, 1979; Haley, 1964; and Levinger, 1963). Families tend to create and maintain a repertoire of interactive behavioral patterns. Some are more common at home and some more present in other environments. All these patterns represent their total
repertoire and tend to be repeated over and over depending upon the environmental setting, who is involved, and how, and the amount of stress the family is currently experiencing. These "outside the home" patterns would also be visible to clinicians in office environments.

**Observer Training**

Training is a crucial variable influencing the output from observers (Weick, 1968). It is during training that events become more familiar and definitions of categories become more precise. This occurs, as the observer gains more experience with the category system and former associations regarding specific behavioral dimensions have less effect. The result is that evaluative coding becomes more neutral and in sync with the coding rules and definitions of the category system. The observers' conceptual orientations which they brought to the research reflected an eclectic synthesis of human behavior and practice theory taught in the Ohio State University MSW I graduate curriculum. This did not include an emphasis on systems or family theory. Neither did it include Gestalt theory or phenomenology. In general, their background reflected a lack of interactional theory and practice experience with family systems. Thus, the conceptual orientation presented in this research represented new theoretical and practice ideas for all of the observers. This reality represented minor difficulties in training as the observers were eager
and open learners. The conceptual orientation was presented as an alternative framework for them to learn now and later evaluate its value and meaning for them as practitioners. They were not asked to change or permanently let go of their present conceptual orientation; rather to add this one to what they had, for the length of time they would be involved in this research. The researchers discussing this issue (Bales, 1950; Weick, 1968; Kent and Foster, 1977; and Kathryn Engel, 1975) confirm that effective, reliable coding requires the observers to temporarily let go of previous conceptualizations and adopt the research conceptualization. This is necessary to generate data which are seen and interpreted from one conceptual orientation definition. It is important to use a common theoretical orientation to enable reliability assessments on what is observed by a number of observers. The observers in this study were able to make the conceptual shift during training demonstrated by the results of the consensus sessions and high inter-observer agreement throughout the study.

Familiarity with codes and coding norms decreases unaccounted for or nonsystematic errors. Some researchers believe familiarization has disadvantages (Selltiz et al. 1976). They state that distinctive features become blurred as individuals learn more about them. In general, there appears strong consensus on the value of training coders to provide reliable data.
Heyns and Lippitt (1954) suggested several training procedures that help to offset observer error: (1) observers watch and record action before they learn the system, to illustrate how many behavioral cues are available and the necessity for using categories with precise definition; (2) provide information about how the categories were built, so that the observer can understand how the categories and conceptual definitions were derived (see Appendix E for material presented); (3) development of written protocols (i.e., written definitions of categories and behavioral indicators) to be utilized by the observers in training (see Appendix E); (4) the use of role-playing and training films.

The training program in this study focused on achieving familiarity with the category system and coding procedures. There were three sessions, four hours long, spaced a week apart. Training included a description of the research project, the research questions, conceptual base, population sample and general methodological issues (see Appendix). Included in this didactic presentation was the explanation of the role of the observer in the data collection and data analysis components of this investigation. After the didactic material was presented, role playing was used to provide experiential learning regarding the identification of dyadic, interactional behavior. The role playing experience also allowed the introduction of behavior which
might be more difficult to code, thus, giving the trainees some experience with a wide variety of interactional behavior. Written definitions were used in the initial training phase to help trainees learn the behavioral definitions of concepts and categories. Bales (1950) recommends that their use be restricted to a short time in the initial training period. "Using them for longer periods of time can make an observer ineffectual in coding live action" (p. 86).

Bales (1950) described two additional issues which pervades training: (1) observer frustration that occurs when an act is missed or placed in the wrong category; (2) criteria for the correctness of categorization (i.e., observers reluctance to admit that they make mistakes and that someone else had more common sense and would code the behavior correctly).

The first issue was dealt with in training by encouraging observers to increase their own tolerance for making errors and to attempt to focus on the present behavior in front of them and not to spend time evaluating and assessing the meaning of the behavior. The second issue was dealt with by creating an accepting permissive atmosphere for the training experience and to encourage their use of the consensus and investigator's definitions and coding norm versus searching for the "perfect" right interpretation which
places too much burden on the observer for evaluation and personal judgment.

The central training activity involved the use of training tapes followed by consensus sessions with the investigator. This method is supported by most researchers using this methodology (Weick, 1968; Kent and Foster, 1977; Jones et al., 1974, Bunsey and Hamburg, 1963).

Jones et al. (1974) discussion of the complexity of observed interactions underscores the need for careful selection of practice observation situations during training. Using a 28 category family interaction code, they found that more complex interactions are consistently coded with lower reliability than simpler interactions. This implies that observers trained to be reliable only with low complexity situations will produce less reliable data when they encounter sessions with more complex interactions. Therefore, they concluded that observers should be trained with tapes that represent the full range of complexities the observers are likely to encounter to mitigate this problem. Corroborative research by Mosh and Makohaneuky in Jones et al., supports the findings that training materials should be selected to provide variable nonpatterned interaction sequences to enhance the quality of post training data.

In this study, the category system was taught by using it to code interactional behavior of couples who were not part of the research population. Tapes of six couples were
presented which demonstrated a wide variety of interactional patterns and styles. These training tapes were made with volunteer, asymptomatic couples in Cleveland, Ohio. The setting was the Gestalt Institute of Cleveland, 1588 Hazel Drive. The training procedure involved showing the tapes initially for observation only. This was followed with consensus sessions with the investigator to discuss questions and issues evoked by the tapes. The group consensus sessions were designed to achieve a common understanding of the definitions for those concepts and behavioral indicators used in the instrument. Issues regarding coding procedures were discussed until a group consensus was achieved indicating total group understanding and agreement about the mechanical and conceptual applications of specific coding procedures (see Appendix). After the training was completed, observers were divided into pairs to perform the coding activity and remained in that pair until they had completed their allotted tapes.

Coding

Coding is the activity of the observer, implementing their judgment regarding what they are observing. It is a special kind of measurement. There are a variety of methods and techniques for collecting data in observational research. All employ a format for recording what is observed. The coding activity represents the assessment
and categorization by the observer of the observed phenomenon. It is similar to a questionnaire created by the investigator (i.e., asking questions to obtain information about a specific phenomenon). The coding action represents answering the researchers question about the issue, behavior, idea, etc. In this research, it provides yes, no, information regarding the occurrence or nonoccurrence of specific behaviors, explained and defined by the investigator and presented in a specific structured format (i.e., category system). Thus, coding occurrence and/or nonoccurrence of behaviors involves making decisions about what one sees and then making a judgment regarding how to classify what one sees, according to the classification system provided by the investigator.

The research objective was to identify and describe the phenomenological interactional sequences or patterns. The conceptual orientation guiding the study is wholistic and concerned with nonlinear analysis of pattern identification, seeing and understanding behavior within a context of interconnections. This epistemology differs significantly from the traditional linear, reductionistic analytical method used in most behavior research. This traditional method analyzes by reducing phenomenon, separating and isolating components in order to understand them, then combines these elements with summative descriptions of the whole. Much of the family interactional research has used
this traditional approach in studying process. Specific components of the process are isolated and analyzed, then summative descriptions (i.e., outcome descriptions) of the process are made. For example, the couple has "X" amount of negative communication and "X" amount of supportive communication and "X" amount of affectional behavior, etc., during that behavioral sequence or entire observational period. That kind of summative description of disconnected, isolated behaviors would have been an incongruent analytical method for this study. It is diametrically opposed to the holistic epistemology of pattern recognition guiding this study. According to Weiss and Margolin (1977) one of the particular characteristics of the coding operation as a measurement is that it specifies what the context of the judgment should be. Most codes specify what degree of flexibility the rater has in identifying and classifying behavior in relation to the context for that behavior (i.e., whether the observer is permitted to focus on behavior connected with the variable they are attempting to classify, as a reference point in the assessment procedure). In this coding system, the coder evaluated the behavior in relation to its connection with the previous behavior and its relationship to the development and resolution of a common figure (a cognitive theme or issue). Behavior was viewed through the lens of interpersonal communication. Thus, individual behavior was evaluated as
communication to the other. Judgment included the interpersonal content and the dominant figure context. The coding procedures and definitions used by the observers are presented in the training section of this report and in the Appendix.

Observers were asked to observe the time frame within a 10 minute context. They were instructed to code the behaviors which dominated or characterized the two minute sequence, in relation to the 10 minute context. Behaviors were evaluated as interdependent parts of a sequence, not as independent, isolated acts. They were instructed to judge how individual behaviors were connected to other behaviors in that time frame (i.e., supportive of the dominant behavior in that time frame or reflective of behavior belonging to a different category or "other" behavior which could not be classified in the specified categories). Each 10 minute tape was viewed twice. The initial viewing was uninterrupted. The second viewing was segmented into five, two minute units. These two minute frames represented the unit of analysis and were coded by the observers during a 15 second break after each two minute unit.

Observers were instructed to indicate the presence of behaviors by placing one hashmark in the space allocated to the behavior. Absence of behaviors was indicated by an absence of hash marks. One mark was used regardless of the amount of that behavior which occurred during that two.
minute unit. Observers coded two complete tapes, involving 80 minutes of observing plus five minutes for coding.

A 15 minute break was followed by one additional 20 minute tape (which involved a total of 40 minutes, for two viewings plus 2 1/2 minutes for coding). This schedule made use of heightened reliability from the observers. A rhythm was established which decreases variability in scoring. As time intervals between scoring increases in length, observers become more variable in their activities (Weick, 1968). Observers reported sustained interest and a high energy level with this viewing and coding schedule during a pretest of the instrument conducted within the training sessions.

The observers were divided into four groups of pairs after the training sessions. Each pair coded 11 tapes, two of which were rated twice by all eight observers. The two tapes were chosen on a random basis to allow an additional measure of inter-observer reliability. The initial coding of the random tapes occurred during the first coding session for each observer pair and the second rating was done during the last coding session for each pair.

The coding activity was completed in three weeks and required a total of 44 hours. During this three week period, each observer pair had their own schedule. Although the time period between coding sessions differed with each
pair, the three week parameter was short enough to prevent "instrument decay" and observer variability due to loss of interest, confusion with definition of terms and/or coding procedures and the potential interactive effects with environmental stimulii. Recalibration of the observers' coding during this coding time period was not considered necessary to guard against and these problem issues, which plague longer coding time periods utilized in larger research projects.
CHAPTER IV

DATA ANALYSIS

Introduction

The data analysis chapter presents the major findings in the four areas of exploration pursued in this study: (1) reliability of instrument; (2) interactional profiles generated by instrument; (3) model development issues; (4) educational issues for research and clinical practice.

The chapter begins with a brief description of how the data were organized and processed for computer analysis. This is followed by the section which deals with establishment of instrument reliability. The succeeding sections present the other major findings: (a) the couples' interactional behavioral patterns identified in the research sample, (b) analysis of behavioral indicators and (c) final analysis of the data obtained from the "other" category which was added to the instrument to obtain information regarding the category system's ability to describe the phenomenological reality with sensitivity breadth.
Introduction to Data Organization and Processing

The data was organized into case files for computer analysis. A coding system was developed to translate the raw data to numerical data. An IBM card file was developed; it was key punched and verified. These data were placed on a tape and stored in the Ohio State University computer system. The Statistical Package for the Social Services provided the programming. Within the SPSS, Update-New, Procedures and Facilities for Releases 7 and 8, 1979, a program is presented allowing the analysis of several variables concurrently. This mult-response program was chosen due to ability to generate the data needed to answer the basic research questions.

Computer Analysis

The SPSS Mult-response computer program (SPSS Update; Hull & Nye, 1979) generated frequencies of observations coded for both spouses. Frequencies were based on the two minute time frame which was the unit of analysis for this study. These frequencies were coded by multiple observers and were presented in varying combinations to answer the research questions (i.e., pair coding--analyzed as a pair--, total group codings--all eight compared as a total group--, and time one and time two ratings as a pair and total group). The mult-response program offered the most useful method for producing the data required to
complete inter-observer reliability percentages. The pro-
gram also generated the data necessary to create interac-
tional matrixes or profiles for each couple. This was
accomplished by generating frequencies within the unit
analysis, via each behavioral indicator, via each observer,
in observer pairs and finally total group ratings on two
video tapes, randomly selected and coded twice (at begin-
ning and ending) of coding activity.

Seven different data sets were developed to accomplish
the analytical objectives: (1) sex of spouses differentiated;
(2) task differentiated; (3) sex and task combined; (4)
couples 1 and 2 differentiated from sample of 30 couples;
(5) couples 1 and 2 differentiated on bases of $T_1$ and $T_2$;
(6) couple demographics; and (7) a general frequency
analysis, outside the basic two minute unit of analysis.

In summary, the printouts generated by the Multi-
response program provided the information required to
answer the questions of most interest in this study: (1)
instrument reliability; (2) usefulness of specific
behavioral indicators to define concepts and facilitate
categorization of interactional process; (3) creation of
couple interactional matrixes or profiles; and (4) need
for instrumentation refinement.

The systems theory orientation in this study required
a method for data analysis which would focus on a number of
variables and their interrelationships simultaneously, rather than a linear/causal analysis. Pattern recognition was the objective in all the specified areas of interest, including instrument reliability issues.

**Instrumentation**

The instrumentation used in the study consisted of three measurements: (1) the observational category system developed to code occurrence/nonoccurrence of specific interactional behavior; (2) couple questionnaire developed to obtain demographic data and feedback comments from the research population; and (3) observer questionnaire developed to obtain demographic data on observers prior to their involvement in the study.

The category system represents the hypothesized conceptual model for viable marital interaction which is being explored in this investigation. A major research objective is to obtain data regarding the reliability and usefulness of this model for describing and assessing marital interaction. It is being proposed that it has potential usefulness as both research and a clinical instrument.

The couple questionnaire was primarily developed to obtain demographic data on the research sample. Included was an open ended question designed to elicit reactive data (i.e., feelings, attitudes, opinions, and/or ideas)
regarding their experience in the research, specifically, information about how the video-taped dialogic encounter impacted upon them, as individuals as well as couples. This measure was added to provide two sources of data regarding the couple's interaction (i.e., (1) observer report and (2) self-report). The self-report measure was voluntary (25 out of 29 were returned and gave information). The open-ended question was designed to allow a wide variety of responses. Those who chose to describe their interaction experiences were given the opportunity. Those who chose to give less personal information about the video-taped experience were also supported. This measure was not intended to seek information about the couple's perceptions of their interaction process. Such a procedure would allow a subsequent comparison between self-report and observer report, and would be a fascinating direction to pursue in future exploration. It was decided not to pursue this issue, due to the addition of more complex data and the consequent expansion of the study, beyond the appropriate limits for exploration at this time.

Reliability

Introduction

A major research objective in this study was obtaining empirical validation for a hypothesized conceptual model to describe and assess marital interaction. The
model is operationalized via the category system used by the observers to code occurrence/nonoccurrence of specific behaviors within six designated categories (i.e., Awareness, Energy/Action, Contact, Resolution, Withdrawal, and Other). The specific behaviors which were coded by the observers as occurring or not occurring were categorized into five major categories. They represent the behavioral indicator defining each conceptual category (see Figure 1, p. 77 for list of categories).

This category system defines the model and is the major instrument which is used in the study for data collection. Thus establishing acceptable reliability for this instrument is a central goal in the study. Reliability percentages have not been established for this instrument's use in systematic observation research. This task is of key importance in the development of future research as well as future clinical application. Since an instrument must be reliable in order to be even potentially valid, data analysis was, therefore, intially focused on establishing inter-observer reliability percentages.

Reliability Measures

The selection of a reliability measure is in part determined by the kinds of data units employed and the time span which the unit represents. Hartmann (1979) classifies two general types of reliability measures, "trial" and
"Session" reliability measures are based on the total number of intervals in which a particular behavior was recorded, the total frequency of the behavior or the total duration of occurrence during each individual session. A measure of session reliability that has been used widely involves computing session totals from each of the observers and then dividing the smaller by the larger total, to yield a percentage agreement score (Selltiz, et al., 1976):

\[
\text{agreement} = \frac{\text{agreement}}{\text{disagreement}}
\]

According to Weick (1968) this agreement/disagreement reliability measure is the most utilized in observation research. Due to the consensus expressed in the literature of observational research, this measure was chosen to compute observer agreement/disagreement.

Three measures were used to compute inter-observer agreement.

1. Observers coded tapes in pairs. Each pair coded 11 tapes, four of these represented the two random tapes which all eight observers coded twice (at the beginning and end of the coding activity). The remaining seven were coded one time by the pair and were not coded by the other pairs.

2. Individual ratings were compared between T₁ and T₂ on the two random tapes (inter-observer reliability).

3. The random two tapes coded by all eight observers reflect T₁ and T₂ observations for the four pairs. Pair
codings were analyzed on each of the two randomly selected tapes for T₁ and T₂.

It has been a common practice to calculate a mean reliability based on a number of reliability estimates (Selltiz et al., 1976). This was done to facilitate reading and comprehension of the numerous estimates required by this study. Mean percentages were obtained by calculating estimates for each of the five two minute time frames which were the basic unit of analysis in the study. The two minute time frame incorporated both spouse's behavior and the combination of Tasks A and B (two ten minute periods of problem-solving activity).

Reliability Findings

Selltiz (1976) states that "the most basic meaning in observational research is the degree to which two or more observers agree on their observations" (p. 87).

Total Groups Comparison on Couples One and Two. All eight observers coded two tapes selected at random, two separate times. Time 1 rating refers to the initial coding of the tapes which occurred at the beginning of the coding activity for that pair. The pair reliability percentages were grouped and a total mean reliability percentage was computed for T₁ and T₂ on couples one and two. T₂ rating occurred at the ending of the coding period and thus represented the pair's last two tapes they coded (see Table 1).
This measure looks at the time differential between $T_1$ and $T_2$ codings. The objective in this analysis is to determine the amount of variance in mean reliability percentages which occurred between $T_1$ and $T_2$ codings.

The data showed a nine point increase in percentage agreement on $T_2$ for couple one. The range of actual scores was 20 points on the $T_2$. On couple two, there was a 10 point increase on $T_2$ ratings. The range of actual scores on $T_1$ ratings was 37 points and on $T_2$ ratings seven points.

The findings from this reliability measure indicates acceptable reliability on $T_1$ codings for couple one and substantial improvement in agreement in $T_2$ ratings. The agreement percentages for couple two, $T_1$ were below the 70% accepted figure (Weiss and Margolin, 1977). However, there was a 10 point increase reflected in the $T_2$ ratings,
demonstrating an acceptable level of inter-observer agreement. The $T_1$ range of actual reliability percentages generated by the four pairs for couple two was 37 points, indicating notable divergence between pairs. The time two rating with only a seven point spread reflects marked changes in pair codings during the second viewing for couple two, and these changes were almost unanimous in agreement.

**Observer pair comparison on couples one and two.**

Observer pairs generally increased their agreement percentages on $T_2$ ratings. Two pairs showed a decrease in agreement (one pair - 6 points and one pair - 2 points) (see Table 2).

**TABLE 2**

Pair Reliability for Couples One and Two

<table>
<thead>
<tr>
<th>Observer</th>
<th>Couple 1</th>
<th>Couple 2</th>
<th>Mean Reliability Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$T_1$</td>
<td>$T_2$</td>
<td>$T_1$</td>
</tr>
<tr>
<td>1 and 2</td>
<td>93.6</td>
<td>89.2</td>
<td>91.0</td>
</tr>
<tr>
<td>3 and 4</td>
<td>100.0</td>
<td>100.0</td>
<td>81.2</td>
</tr>
<tr>
<td>5 and 6</td>
<td>93.0</td>
<td>98.0</td>
<td>88.8</td>
</tr>
<tr>
<td>7 and 8</td>
<td>76.8</td>
<td>90.0</td>
<td>90.8</td>
</tr>
</tbody>
</table>

All ratings for $T_1$ and $T_2$ met the criteria indicating an acceptable level of agreement. Only two ratings were below 80%, three were below 90% and the remaining 11 were
above 90%. This finding reflects substantial pair agreement on their codings of couples one and two for both time periods.

Intra-observer reliability on couples one and two

The range of mean reliability percentages for all eight observers was 78 - 98%. Three observers reflected intra-reliability percentages in the low 80s, two in the high 70s and three in the 90s (see Table 3). These data reveal overall acceptable levels of agreement.

Table 3

<table>
<thead>
<tr>
<th>Observer</th>
<th>Couple 1 T1 and T2</th>
<th>Couple 2 T1 and T2</th>
<th>Mean^a</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>83</td>
<td>85</td>
<td>84</td>
</tr>
<tr>
<td>2</td>
<td>85</td>
<td>79</td>
<td>82</td>
</tr>
<tr>
<td>3</td>
<td>95</td>
<td>95</td>
<td>95</td>
</tr>
<tr>
<td>4</td>
<td>95</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>5</td>
<td>80</td>
<td>78</td>
<td>79</td>
</tr>
<tr>
<td>6</td>
<td>86</td>
<td>78</td>
<td>82</td>
</tr>
<tr>
<td>7</td>
<td>79</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>8</td>
<td>73</td>
<td>83</td>
<td>78</td>
</tr>
</tbody>
</table>

^aRange of mean scores 78-98 percent.

The two observers who did the most changing in their second coding of couples one and two were not paired together. Both spontaneously reported to the investigator
after the coding sessions that they believed that they had learned a lot from the experience and thought that their codings reflected the change experience from this learning. The remaining six observers (three in the 80s and three in the 90s) appeared to maintain a more stable interpretation of what they observed and how they recorded what they observed.

Pair Reliability Percentages for Seven Tapes Coded One Time. Table 4 shows that all four rater pairs demonstrated very high inter-observer agreement on the seven tapes which were coded by them, exclusively. The range, 91%-97% reveals exceptionally high agreement. They appeared to have observed and interpreted what they saw almost identically. The pair operated as a unit in sync, although verbal interaction between them was not permitted until their codings of each tape were completed and collected by the investigator. General sharing and social interaction did occur outside the coding environment as they shared classes and other interests together.

The pairs selected each other during the training period. The dominant criteria they utilized for pair selection was the ability to match schedules for coding sessions during the summer work and academic schedule. Further analysis of this finding might produce other information to explain the very high inter-observer agreement. Their demographic data do not reveal any significant
Table 4
Pair Reliability Percentages on the Seven Tapes

<table>
<thead>
<tr>
<th>Raters 1 &amp; 2 Tape Reliability No.</th>
<th>%</th>
<th>Raters 3 &amp; 4 Tape Reliability No.</th>
<th>%</th>
<th>Raters 5 &amp; 6 Tape Reliability No.</th>
<th>%</th>
<th>Raters 7 &amp; 8 Tape Reliability No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>85.0</td>
<td>5</td>
<td>100.0</td>
<td>4</td>
<td>95.0</td>
<td>7</td>
<td>90.0</td>
</tr>
<tr>
<td>8</td>
<td>100.0</td>
<td>9</td>
<td>93.2</td>
<td>6</td>
<td>100.0</td>
<td>10</td>
<td>90.0</td>
</tr>
<tr>
<td>17</td>
<td>100.0</td>
<td>12</td>
<td>95.0</td>
<td>11</td>
<td>85.0</td>
<td>14</td>
<td>100.0</td>
</tr>
<tr>
<td>24</td>
<td>96.6</td>
<td>13</td>
<td>93.2</td>
<td>15</td>
<td>100.0</td>
<td>18</td>
<td>85.0</td>
</tr>
<tr>
<td>25</td>
<td>79.6</td>
<td>16</td>
<td>100.0</td>
<td>19</td>
<td>100.0</td>
<td>22</td>
<td>93.2</td>
</tr>
<tr>
<td>28</td>
<td>100.0</td>
<td>23</td>
<td>95.0</td>
<td>20</td>
<td>100.0</td>
<td>26</td>
<td>100.0</td>
</tr>
<tr>
<td>29</td>
<td>100.0</td>
<td>27</td>
<td>100.0</td>
<td>21</td>
<td>100.0</td>
<td>30</td>
<td>79.6</td>
</tr>
<tr>
<td>Mean</td>
<td>94.3</td>
<td></td>
<td>96.6</td>
<td></td>
<td>97.1</td>
<td></td>
<td>91.0</td>
</tr>
</tbody>
</table>

factors to explain this finding. Three were married, three were divorced and two were never married. Two of the married were paired. Two of the divorced were paired and two pairs were comprised of married with single and divorced with single. The only variable of any significance is the age grouping. Pairs tended to grouped according to age. The other data regarding their academic, work, and personal experiences were similar and nondiscriminative on any dimension. Training was experienced in the total group. Additional training and/or efforts to calibrate the observers was not done due to the short time period allotted for the entire coding activity (three weeks).

Any questions which emerged from pairs during their coding session were handled directly by the investigator.
and then repeated to the other pairs during their coding sessions. A major effort was made to create an equal coding environment for all four pairs.

Based on the types of observer error which have been identified as occurring in observations on ideal observational study (according to Weick, 1968) includes the comparisons made in this study:

1. The ratings of several observers coding the same event are compared.

2. The agreement of several observers observing an event at different times are compared.

3. The observations of a single observer compared at different times (check on internal consistency - the extent to which the observer agrees with self).

Weick (1968) states that the third measure of reliability would be expected to yield the highest correlation if the category system is explicit and well defined. This measure did yield higher percentage agreements than did the pair comparisons on the same tapes T₁ and T₂ when pairs were compared with other pairs. Pair estimates when analyzed as a unit of two yielded the highest percentage agreement of all the reliability measures utilized.

The inter-observer reliability findings reveal overall substantial agreement percentages on all four measures utilized.
The instrument appears to have demonstrated competence as a tool for describing marital interaction in the research population. Competence is defined as clarity, behavioral specificity and relevancy (to the actual world of marital interaction). Competency is manifested by observers, utilizing it to produce reliable information. These findings suggest that the category system for describing what is seen and heard in viable marital interaction can be taught and understood in a relatively short period of time. The category system represents a conceptualized model for organizing and giving meaning to phenomenological interactional data. It is oriented toward pattern identification and nonlinear systemic analysis. Since its ability to generate reliable data has been demonstrated it is now appropriate to look at what data was generated by the instrument.

**Couple Interactional Profiles**

**Introduction**

The observations coded by the observers were analyzed to answer several questions. One major question concerned identifying patterns within marital interaction. This was accomplished by computing frequencies of observations for specific behaviors within a particular time context. These analyses generated interactional patterns for each couple. The behavioral description for each couple is
called "couple's interactional profile." This term is used to translate the segments of the couple's interaction into a holistic description, which could be shared with the couple as feedback about the overall, general nature (i.e., process and structural characteristics) of their communication with each other in problem-solving activity.

In addition to generating an interactional profile for each couple, a computer program was written to generate a "macro" profile for the entire research sample (excluding couples one and two). The product which was developed from combining the individual profiles of 28 couples is identified as the "macro profile" (see Table 5, p. 116). Ten couples from the sample had individual profiles which approximated this "macro profile" (refer to tables 9,12,15,16,17,18,19,23,24,28 in Appendix).

A conceptualization of what the interactional profile of viable marital interaction would look like was developed from the theoretical premises guiding this research (i.e., Gestalt psychology, organismic, nonlinear systems theory, phenomenology and family systems theory). The pattern would show frequencies occurring sequentially within a time context resembling a geometric design (see Table 6, p. 116). Two of the couples in the research sample demonstrated an interactional pattern which nearly matched this conceptualized pattern (see Tables 8 and 21 in Appendix).
Table 5
Macro Interactional Profile for 28 Couples
(In percent)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Awareness</td>
<td>35</td>
</tr>
<tr>
<td>Energy/Action</td>
<td>39</td>
</tr>
<tr>
<td>Contact</td>
<td>25</td>
</tr>
<tr>
<td>Resolution</td>
<td>1</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>0</td>
</tr>
</tbody>
</table>

Note: "Other" category not included in the 32 Interactional Profiles as percentage of observations were all below 1 percent of total observations for that time frame.

Table 6
Conceptualized Interactional Profile
(In percent)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Awareness</td>
<td>70</td>
</tr>
<tr>
<td>Energy/Action</td>
<td>30</td>
</tr>
<tr>
<td>Contact</td>
<td></td>
</tr>
<tr>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td></td>
</tr>
</tbody>
</table>
Twelve couples from the research sample of 30 demonstrated interactional patterns which generally approximated the conceptualized pattern (see Tables 9, 12, 15, 16, 17, 18, 19, 23, 24, 28, 8, 21).

This conceptualized interactional pattern represents the nonlinear systemic model which this study seeks to investigate empirically for clinical and research work with marital systems. Hypothetically, the interactional behaviors of their interrelationships and their sequential connections resemble an on-going cycle of:

1. two people sharing individual thoughts and feelings
2. reaching out to the other and taking in from each other
3. jointly creating themes of mutual interest from the integration of individual needs, ideas and feelings
4. doing meaningful activities together (as a product of their sharing and creating)
5. savoring this experience of creating and doing, allowing their energy to decrease after accomplishing what they set out to do
6. letting go of the experience and resting; and
7. allowing new energy to emerge, slowly, as the next "figure" of interest is experienced independently and then shared with the partner as the new cycle continues.
Although the remaining eighteen couples in the sample did not fit this conceptualized interactive pattern, they were observed initially expressing individual ideas, reaching out to each other, taking in from the other, creating ideas together, exchanging energy regarding their mutually developed plans and, except for six couples, affirming and savoring the experience was observed. Reduction in energy as they came to closure was part of the process for most of the couples. Each had their own viable pattern which they had created and were now sustaining as it fit their needs as a system.

Six couples in the sample were observed as interacting in only two of three categories during the entire time period which contrasts with the remaining 24 who were observed using behaviors within all the categories given (see Tables 20, 31, 32, 33, 35, 36, 14, 25, 26, 27, 29, 30 in Appendix).

All 30 couples' interactional profiles are available in the Appendix. Twelve couples had their own unique interactive profiles which could not be grouped in more than pairs or triads (see Tables 26, 27, 30, 34, 17, 25, 7, 14, 13, 12, 10, 11). The profiles generated by the data revealed that 12 of the 30 couples, identified a focus, sustained it and delayed closure until the fourth or fifth frame, allowed the maximum amount of time provided in the task for full discussion, and development before resolution and letting go of it. Time was spent dealing with the resolution, as
well as theme development in these couples' interaction (see Tables 8,21,9,12,15,16,17,18,19,23,24,28).

In six of the remaining eighteen, resolution did not occur; these couples spent the entire time allotted identifying a mutual theme of interest and developing it in the time allowed (see Tables 20,31,32,33,35,36). The 12 couples in this group of 18 who did experience resolution did so early in the task (see Tables 26,27,30,34,17,25,7,14,13,12,10,11). Identifying and developing a mutual theme of interest was done in the first two time frames (four minutes). The remainder of the time was utilized in resolution activity with brief periods of new energy and contact; however, the couples were primarily using their energy to summarize and clarify what had been decided earlier. The energy level remained low after the second frame.

The polarity of this group were the six couples who maintained high levels of energy and contact and did not deal with resolution, decreasing their energy and/or any finishing work (see Tables 20,31,32,33,35,36).

In this group of 18, all differed in how they paced themselves (i.e., the amount of time they utilized in specific behavioral categories). They also differed in their choice and variety of behaviors utilized in each behavioral category.
Summary of Findings

A "macro profile" was generated for the group of 28 couples by combining the 28 individual interactional matrixes via a computer program. This combined profile was also reflected in 10 of the 30 couple's profiles. Two couples in the sample nearly approximated the interactional pattern, conceptualized from the theoretical premises underlying this study. This combined group of 12 couples demonstrated interactional patterns which broadly approximated the conceptualized pattern. In the remaining 18 couples, a group of six reflected a restricted use of two or three categories throughout both 10 minute tasks. Twelve couples could not be categorized into groupings beyond pairs or triads.

The findings revealed that the majority of the couples did not function in the pattern suggested by this theoretical perspective; however, the conceptualized model was useful as a guide in pattern recognition. It did identify and describe the interactional patterns of each couple. Thus, the model appears to demonstrate ability in pattern recognition, regardless of the nature of the pattern. It offers a guide for gathering and organizing interactional data which can formulate the specific unique process profile or paradigm for that couple system.
Model Development Issues

Behavioral Indicators—Pattern Utilization

Related to the research interest in developing new instrumentation for clinical application with intimate systems was the discovery of the most relevant useful and accurate behavioral indicators to define the concepts used in this conceptual model. This new systemic, nonlinear epistemology reflects a conceptual shift in how one views a marital relationship. The new perspective defines the marital relationship as a system—a unit, versus two individuals with independent behavior patterns who influence each other. All conceptual frameworks contain concepts used to describe and give meaning to phenomenological data. The concepts' usefulness and relevancy depend on their ability to accurately reflect the reality they purport to describe. The model proposed in this study contains concepts which require empirical support regarding relevancy, clarity, specificity and accuracy for use in describing and giving meaning to the phenomenology they attempt to portray.

The behavioral indicators utilized in this study represent the behavioral descriptions chosen to define the major conceptual categories. The categories represent sequential interactive stages of the interactive process. Each stage (i.e., category) is labeled by a concept (for example: Awareness, Energy/Action, Contact, Resolution and
Withdrawal). These five conceptual labels of interactive phases require behavioral definitions to enable accurate use by those who are observing and deciding and recording what it is they are seeing and hearing. The clinician or research observer who is using this conceptual guide for organizing and defining their perceptual field as they observe two people deal with each other, needs a clear understanding of what the major concepts mean. The behavioral indicators attempt to give meaning to these five conceptual stages. This research is interested in discovering their usefulness in this purpose. Instrument development involves this kind of exploration and consequent modification and refinement based on the findings generated by observers' application of the indicators. To discover the usefulness of indicators, patterns of utilization were analyzed. Three categories used three indicators to define that interactional phase or stage.

Awareness
1. Information shared without being asked
2. Information given in response to questions
3. Questions asked.

Energy/Action
1. The use of energy to reach across to join with another, getting other to be in same place as you. Behavioral indication that someone is interested in something (i.e., body language).
2. Behavioral attempts to mobilize another's energy and interest, "Let's. . ."; "How about we. . ."; "Why don't we. . ."

3. Behavioral indications of willingness to join with other.

Contact
1. Behavioral indications that joining, unanimity, like-mindedness occurs (i.e., "OK, say we. . .")
2. Indications of understanding (agreement not necessary)
3. Being in sync with another

One category utilized five indicators to define the conceptual category:

Resolution
1. Test for finishing
2. Behavioral attempts to "round off" any sharp edges remaining to experience
3. Reflections, summarization or other attempts to "own" the content or experience.
4. Celebration or mourning the experience
5. Attempts to use up, dissipate left over energy.

Withdrawal
1. Reduction of energy so that experience can fade
2. Pausing, falling into silence.

The indicators were utilized equally in Awareness, Energy/Action and Contact categories. This equalization pattern was stable for the entire sample and held constant
during the second coding times for both random couples one and two coded by all eight observers. Resolution with five indicators revealed different usage patterns. Overall the least used indicators were "tests for finishing" and "celebrating or mourning." In the group of 28 couples, "celebrating and mourning" was used .06% and "tests for finishing, .09%. In couples one and two, the random couples coded by all eight observers twice, this order was reversed.

The most utilized indicator for this category over all 30 couples was "summarizing." The second most utilized indicator was "using up energy." In those couples who were coded with more than one indicator in Resolution, the indicators were utilized equally. In those couples who were coded with only one indicator, "summarizing" was the one chosen to define/describe the interactive behavior.

The withdrawal interactional behavior was observed in 16 of the 30 couples. The two indicators were utilized almost equally to describe the interactional behavior (.09% for "reduction in energy" and .06% for "pausing--periods of silence"--representing the group of 28 couples). This order remained the same for couples one and two.

The behavioral indicators used to define the conceptual categories were utilized with minimal confusion. With the exception of one category (Resolution), they were used equally to describe behavior. The significant disagreement regarding their appropriate use occurred in the
contiguous categories of Contact and Resolution (i.e., when one indicator of Resolution was used "summarizing" was chosen and often the rater's partner coded the couple in the Contact category utilizing "understanding demonstrated" or "in sync").

It appears from analyzing these data that during the training period more emphasis should be placed on differentiating Contact behaviors and Resolution behaviors. The other findings regarding how and when the indicators were used reflect overall understanding of the indicators' flexibility in usage and high agreement on when and how they should be used.

The equal utilization pattern demonstrated in all categories, except Resolution, shows remarkable flexibility and agreement regarding their discriminating ability in describing interactional behavior. Apparently, their breadth, enabled usage without creating observer burden and confusion which more precise, narrowly defined indicators often generate. The research literature explains that the more molecular, intensive category systems (i.e., with categories and indicators describing minute, definitive behaviors) place more burden on observers to make more exacting judgments.

The exploratory design in this research is congruent with a molar, extensive category system. This type of system is designed with broad behavioral descriptions to
facilitate gathering all possible behavioral variations of a concept to increase our knowledge about the phenomenon and allow more precise, refined definitions for future research. The more precise behavioral descriptions are created from these early broad explorations.

**Potential Category Confusion**

The development of an instrument involves identifying weaknesses as well as strengths. It was of crucial importance to discover the potential areas in the instrument which revealed a lack of clarity, specificity, congruence, relevance, breadth, sensitivity, etc.

In order to locate the potential areas of confusion, ambiguity and/or irrelevance, the observers disagreement patterns were analyzed. It was assumed that observer disagreement might possibly indicate observer confusion, due to poorly defined behavioral indicators and/or lack of specificity and discriminative ability (i.e., too similar in definition and description of behaviors). This assumption would have more weight if observer disagreement was substantial. Analysis of where and how observers disagree might reflect specific areas which require more attention, clarification, redefinition and/or identity training priorities which should be incorporated in future research to facilitate clearer understanding and more reliable application of the category system.
The observers' coding of 14 couples out of the group of 28 (excluding couples one and two) revealed some category disagreement. This disagreement concerned which category was the most appropriate to describe the couple's interactional behavior during that unit of analysis (i.e., the two minute time frame). Disagreement was produced by one rater coding the couple in a specific category and the rater's partner coding the couple in a different category or not coding occurrence of a behavior, which was coded by the partner.

The time frames revealing the most disagreement were the fourth and fifth, with eight and seven occurrences, respectively. In the group of 28 and couples one and two, the categories had the following number of disagreements: Awareness - 1; Energy - 4; Contact - 10; Resolution - 9; and Withdrawal - 0.

The categories which revealed significant disagreement were Contact and Resolution with five splits (2 pairs coding a couple in Contact or Resolution and 2 pairs coding the couple in the contiguous category). This categorical disagreement possibly indicates observer confusion from lack of clarity and explicitness in the behavioral indicators. The possible problem categories as revealed by the data from the group of 28 couples and couples one and two are Contact and Resolution.
The disagreement regarding the most appropriate category during a specific unit of analysis for couples one and two occurred in one pair out of four utilizing a category which the other three pairs did not use to describe the behavior in that time frame. In all of these codings, disagreement occurred when one pair used an additional category, beyond the categories all used to further define and describe the specific interactional behavior.

In summary, the findings demonstrate observer understanding of the majority of the behavioral indicators. Their usage pattern also indicates variety in their application and equal usefulness as descriptors of process. The confusion which did occur was reflected in higher inter-observer disagreement when coding behaviors in the Contact and Resolution categories. This disagreement on the most appropriate category to describe the interaction at a certain point in time generally occurred in the fourth or fifth time frame. The data indicate some observer difficulty in differentiating Contact and Resolution behavior. This interpretation is based on one observer utilizing an indicator of Contact (i.e., understanding demonstrated or in "sync") to describe the interaction and the observer's partner utilizing an indicator of Resolution (i.e., "summarizing" to describe the same behavior).
Analysis of the "Other" Category

The "Other" category was added to the category system to provide a means which would tap the validity of the instrument. The breadth and depth of the five major conceptual categories created to describe the entire phenomenological interactive process could be examined by analysis of this category. The inclusion of this category gave the observers a structured opportunity during each two minute unit of analysis to add behaviors which they observed and were not a part of the category system. Observers were instructed to use this category freely whenever they identified behaviors which could not be coded in the defined categories. This category provided a valuable input for collecting maximum information regarding the phenomenon of interest (i.e., viable marital interaction). Its inclusion is of key importance in exploratory research when one is searching for all the possible behavioral variations of a specific phenomenon. The data obtained in this category could result in a major modification of the category system if the findings indicated substantial areas of behavioral interaction which occurred and could not be classified in the defined system. At the least, the findings would suggest minor modifications in the established system to increase its validity as a comprehensive and sensitive model for describing marital interaction.
The "other" category represented two empty lines, labeled Comment No. 1 and Comment No. 2. These data were grouped into five categories (see Appendix for category descriptions). This category gave the observer a structure to enable 20 comments for each couple, or 40 comments if made individually for each spouse. This included both tasks A and B.

A total of 72 observations/comments (from a potential of 600 to 1200) were made by the eight observers for the sample of 30 couples. Two categories created by grouping these data contained the majority of observations.

One described behavior which occurred during the time frame and was not congruent with behavior which dominate or characterized that time period. All of this behavior was observed during the fifth frame in couples who had completed Resolution behavior and brief Withdrawal behavior (i.e., new behavior was observed which did not fit the conceptualized indicators of Resolution with Withdrawal).

These data suggest the possibility that the actual phenomenological process requires a different conceptualization than the one suggested by the instrument. No couple sustained Withdrawal behavior the entire two minute unit of analyses. New energy emerged motivating the couple to begin a new discussion during this time frame. This phenomenon may have also been a condition created by the research "laboratory" environment. Further research would
would need to deal with this issue in order to learn more about the actual phenomenological process of finishing and closure interactional activity.

The second dominant grouping described behavior in a time frame which was not congruent with behavior which had occurred in previous categories. For example, the new behavior indicated agreement was not accomplished earlier, even though stated clearly. This new behavior was described as opposing, aversive, deflective, conflictive. It created confusion and a decrease in the partner's energy. These couples were unable to sustain Energy and Contact for effective Resolution and closure.

In summary, analysis of the "other" category suggests that attention should be focused on (1) the Withdrawal category and (2) the instrument's lack of indicators which deal with "communication deviance" (i.e., incongruency, blocking, deflecting, double bind message which result in confusion, loss of energy and system inability to sustain focus which allow joining and Resolution/closure activity).

Analysis of the findings from the "Other" category identified a second area in the observation instrument which requires further development.

The present behavioral indicators for the Withdrawal category do not accurately reflect the phenomenological process of the closure, finishing activity for half of the research population. Sixteen of the 30 couples were
observed as experiencing this behavioral process. The findings from the "Other" category reveal that behavior occurs during the closure activity which is different from the conceptualized behaviors defining that stage in the category system. Indicators should be broadened to include behavior which occurs after the Resolution activity is completed. The indicators could describe random, unfocused activity which is clearly separate from the task activity.

The couples who were coded in this category, experienced brief episodes of Withdrawal as defined by the two indicators in the instrument. After "reduction of energy," "pausing" and periods of silence was observed, new energy emerged and was experienced in random, unfocused verbal and body activity during the two minute unit of analyses. This energy was not utilized to identify a new "figure" of individual and/or joint interest. Thus, it can be assumed that the energy was part of the Withdrawal experience. It appears that a more accurate description of the Withdrawal component of the closure/finishing process would include an active phrase of interactive behavior. This finding represents a significant change in how to accurately describe this phase of the interactive process. The conceptualized description emphasizes a resting, low energy noninteractional process.

Fourteen of the couples did not experience Withdrawal according to the observers. Six of this group remained in
two or three categories throughout the time period (i.e., Awareness, Energy/Action and Contact). The remaining eight couples of this group of 14 were observed interacting in the Resolution category and usually were coded in this category for more than one time frame. This suggests that for these eight couples the closure/finishing process was in reality the behaviors classified in the Resolution category. For them, closure appeared to be the activity of "using up energy," "summarizing" and "rounding off the edges of the experience."

This finding suggests that a more accurate description of the closure/finishing process when dealing with a primarily intellectual problem-solving activity, may in fact, more closely resemble the Resolution process than the Withdrawal process defined in the instrument. The other possibility may be that one minute of Withdrawal behavior out of a 10 minute encounter may more accurately reflect the ending process than an entire two minute segment. These eight couples who experienced a full Resolution process reflected a variety of behaviors which included brief moments of "reduction in energy" and "pausing" interspersed with more active Resolution behavior (i.e., "summarizing" and "using up energy").

All of these findings suggest the need for more exploration of the phenomenological process of the finishing/closure activity experienced in marital interaction.
Distinctions between closure process during a problem-solving activity would be an interesting direction to pursue in future research.
CHAPTER V

IMPLICATIONS

Review of Major Findings

The major findings evolved from investigating the research questions motivating the study. Reliability findings and couple interactional profiles directly dealt with the two initial research questions: (1) Can the conceptualized model for describing viable marital interaction be operationalized in an observational category system and demonstrate acceptable inter-observer reliability? (2) What are the components of viable marital interaction and how are these components structurally interrelated?

The four measures of inter-observer reliability produced high inter-observer agreement which is substantial empirical support for the instrument's reliability. Analysis of behavioral indicator usage dealt with the category system's demonstrated capacity for operationalization. The findings revealed a minimum of observer confusion. With a few exceptions, the indicators demonstrated clarity, relevancy and specificity. Additional findings regarding the usefulness and relevancy of the category system were obtained by analysis of observer disagreement in category usage. Two categories, namely, Contact and
Resolution emerged as needing further clarification and differentiation.

Analysis of the "Other" category produced data which tapped a validity dimension of the instrument. The findings identified two areas of interactive process which the instrument did not deal with accurately and/or include in its category system (1) aversive, problematic behavior defined as blocking, opposing, deflective, conflictive and/or incongruent communication, (2) the finishing/closure interactive experience was not accurately and fully described by the category system.

The findings revealed that the process components described in the observational category system were observed in the research sample. The structure of these components comprised several pattern configurations. Twelve couples demonstrated overall patterns which could be grouped into one general pattern approximating the conceptualized pattern suggested by the investigator. Twelve couples developed their own idiosyncratic patterns which could not be grouped beyond pairs or triads. Six couples generated a pattern which utilized two or three (out of five) categories throughout the entire time period.

Reliability Findings: Research Implications

Replication studies using this instrument are needed to add to the instrument's reliability and validity.
Increasing the instrument's precision leads to its future use in description research.

In addition, studies should be designed using the instrument to examine different populations with more definitive narrow parameters (i.e., racial, ethnic, age, income level, childless, educational level, etc.). The information obtained from specialized population groups would add to our knowledge base regarding the processes and structural characteristics of interaction which exist in marriages independent of these demographic variables and could identify any trends associated with certain population groups.

This model offers a schemata which is value-free regarding functional/dysfunctional characteristics. Thus, an appropriate research application could be the development of intimate system paradigms. These would be built by using the category system as an observational instrument with many varying populations. The data generated produces couple interactional profiles. These individual interactional profiles could eventually be grouped toward the development of interactional typologies for marital systems which are judgment-free regarding functional/dysfunctional characteristics. The criteria and parameters used to describe the marital system typologies would emerge from the data, versus a typology classification developed from criteria established primarily by the investigator who chooses specific dimensions of interest to focus on. Typologies
based on specific dimensions imply a system's degree of possession of certain qualities. That perspective contains assumptions regarding what amounts are necessary for the system to possess to enable its acquiring the state of normality. The typologies suggested from the findings in this study would constitute a wide variety of interactional profiles of marital interaction organized around how information is handled in a system. The typologies could reflect system evolution versus static descriptions often illustrated on grids or continuums.

In conclusion, establishing high reliability for this instrument (i.e., category system which operationalizes the model) supports the rationale for explorative application in clinical and research work. The initial investigation demonstrated that with minimum training, observers can use it to describe marital interaction according to these conceptual definitions. Thus, it demonstrated enough dependability to warrant continued exploration in clinical and research practice.

Its ability to identify and describe interactional patterns has significance for the clinician who chooses to work in a holistic, nonlinear systemic manner. This perspective places importance on the relationship between components rather than on the components themselves. The metaphysics of pattern or epistemology of pattern states
that the context is primary and the objects within are secondary.

Reliability Findings: Clinical Implications

The category system is the proposed nonlinear systemic model this study sought to validate. It represents a schemata for identifying and articulating process behavior in intimate interaction. The model organizes and gives meaning to what is perceived when marital interaction is observed.

The clinician is concerned with assessment and intervention. Minuchin (1974) has stated that "any type of diagnosis is merely a way of arranging data" (pp. 131-133). This model offers a method for organizing and assessing interactional data which emerges phenomenologically as couples deal with one another in a problem solving encounter.

Intervention with marital systems requires a model which can guide clinicians in knowing what and how to look at, in the phenomenological process. It offers a framework, a perceptual guide, or lens to accomplish focused observation and organization of the vast amount of data which is seen, heard and experienced during a marital interactional encounter. Clinical application requires this information to generate feedback which is offered to the couple about the nature of its processes. In interventive work, the
The clinician is teaching the client system about its own process, how it is patterned and how it operates. The clinician's assessment and interventive goals are to discover how the couples' behaviors co-exist, co-evolve and are maintained in their system; and, to provide this information to the couple in a meaningful paced way. System analysis can only be achieved by assessing the system while it is functioning to discover its interactional patterns.

The implications of establishing high reliability for this model means that it can be used by clinicians, with substantial confidence, to identify the system's patterns; to discover how it coheres, fits together, and operates as a unit over time. The descriptions produced by the model constitute interactional patterns, which are systemic and nonlinear. Interventions with the system are created from this pattern information. This information enables the clinician to approach the client system and work with it in a manner which conveys a holistic, nonjudgmental perspective. This perspective places importance on the relationship between components rather than on the components themselves. The metaphysics of pattern means that context is primary and the objects within are secondary. Interventions designed to alter system behavior must focus on the established patterns within the system. System change results from pattern change. Technology exists to bring
about pattern change; however, this relies upon initial pattern recognition by the clinician. This holistic systemic epistemology rejects linear causality and/or dualistic thinking which focuses on parts of system causing other parts. The nonlinear model describes system behavior as co-evolutionary. The question is: How does this system fit together? The model organizes interactional data for the construction of that system's unique patterning, how it operates at that point in time. Interventions are designed to provide the system with feedback about its process; how its behaviors co-exist, co-evolve and are maintained in the system. This feedback may be used by the system to evaluate how it is functioning and to make decisions about continuing these process and/or to make alterations which would more nearly meet its current needs. The clinician is teaching the system about how it functions or operates as a unit. Thus, interventions are based on the knowledge about that system's unique interactional patterns which are identified by this proposed model. It is through pattern identification (i.e., the understanding of relationships between components) that one discovers how a system coheres, fits together and operates as a unit over time. Seeing and being able to construct and translate the system circularity into a graphic pattern representation is a clinical task of primary importance. The reliability findings indicate that this instrument can be used to achieve this task.
The clinician views behavior from individuals as elicited and supported by the system and understands that it may only be present while the person is a part of that specific system. The system axiom of nonsummativity asserts that information obtained by viewing the two individuals' behavior separate from their system context and then added together will not describe the dynamics of their system. The system chemistry and the individual behavior can only be understood by viewing the individuals in dynamic interaction. This instrument enables the clinician to see the "system chemistry" versus seeing individuals and their behavior as separate entities existing within the interactional context. Social workers working with couples who are temporarily experiencing distress can benefit from using this model to assess and develop interventions which are systems oriented.

Couple Interactional Profiles—Research and Educational Implications

The category system's substantial ability to identify and describe the process components in viable marital interaction means that we have some knowledge about what behaviors do constitute this process. This knowledge has implications for family life educators, social work practitioners and human behavior scientists. Knowing that specific interactional behaviors characterize viable
marital relationships provides a direction for education, practice and future research. These processes include: equal sharing of information about the self—spontaneously and in response to questions from each other; reaching out to each other to stimulate and invite the other's input and/or cooperation; listening to each other and being influenced by what they hear (energizing themselves and each other); identifying a mutual theme and sustaining a focus; maintaining enough system energy to accomplish mutual understanding and follow through on plans jointly created; and finally, skills in bringing closure to an issue and letting go of it to allow rest, new energy and ideas to emerge. Clinicians and educators could support the development of these interactional skills in couples who lack specific skills and/or have developed difficulty with any of these processes.

The findings demonstrated that these process components were present in effective problem-solving behavior. The implication is that if these processes become blocked or are not sufficiently developed, the system may be less able to effectively deal with its functions and system tasks. Couples who are experiencing dysfunction in relation to accomplishment of specific system tasks could be studied using this instrument to look at and describe their interactional behavior. It would be interesting to learn if these troubled couples display significantly different
interactional processes than the couples studied in this research.

The structural make-up of these process behaviors differed with each couple and generally comprised many pattern configurations. Thus, patterning is clearly idiosyncratic for each couple. There is no major pattern which characterizes viable marital interaction. All but six of the couples demonstrated the full range of process behaviors identified in the category systems. The interrelationships and pacing of these process behaviors differed with each couple.

An additional application of these findings in their use is cross-system level research. We now have some knowledge about system components, processes and structure on one system level of organization (i.e., the marital dyad). It is now possible to use this information to formulate hypotheses for the next level of system organization (i.e., the nuclear family). It would be interesting to discover the similarities and differences in system processes and patterning in comparison with the marital system.

The research focus suggested would be appropriate after additional model development and exploration with another marital population. The instrument's reliability and validity should be the next research priority.
Couple Interactional Profiles—
Clinical Implications

The findings suggest that specific processes do characterize viable interaction but that no one pattern for these processes exists. Each couple had their own viable pattern which they had created and were now sustaining.

What is clear from these findings is that couples develop their own idiosyncratic interactional patterns and that an infinite number of couple patterns may exist within the broad span of marital couples who live most of their lives without chronic, crippling emotional symptoms. This finding has implications for the clinician. There may be no one optimum, healthy pattern of interaction. Thus, clinicians have no empirical support for directing a couple toward a specific interactive style or method which characterizes asymptomatic interaction. This means giving up a therapeutic position of pushing or pulling the couple to a place he/she thinks it "should be." The corollary principle is giving up the idea of the clinician as a "force acting upon the client system" to bring about change. Instead the therapeutic position becomes more neutral and directed toward helping the system discover how it fits together as a system (i.e., how its individual pieces are connected to form its unique coherence as a system). These couples will, at times, experience crisis, resolve their problems and continue their lives together or dissolve
their systems and form new ones. The clinical issue becomes developing an epistemology and technology for working with these couples when they become temporarily stuck. Professional assistance can offer them information about their interactional processes (what and how they are doing to keep themselves stuck). With this process awareness, problem patterns for the system can be altered to allow new interactional behavior which can more appropriately meet the changing needs within the system. In this view, dysfunction is in relation to each couple's idiosyncratic patterns rather than in relation to some external, preconceived definition of health/illness used as a model for evaluating, and judging all marital couples.

Thus, the crucial need of clinicians becomes a methodology for identifying each couple's own idiosyncratic patterns to enable feedback to the system about its processes (i.e., how they function together). The instrument used in this research demonstrated potential as a tool for describing idiosyncratic patterns which constitute the couple's interactional profile.

We need to know more about the wide range of interactive styles which the majority of families have evolved to "re-tool" our intervention strategy and establish new parameters and issues for research.

The direction in clinical practice with family systems suggested by these findings is toward the development of a
generic, value free, pathology free paradigm which can construct each couple's unique idiosyncratic interactional profile. This model could be used in clinical and research work to generate a data bank comprised of individual couple profiles which could eventually lead to the construction of interactional typologies organized around "family singularity" in establishing and accomplishing system viability.

The model examined in this research demonstrated capacity for describing "what did in reality exist" in couples' interaction. The data did not verify the suggested conceptualization of structure proposed before the research was implemented. This conceptualization was offered as the potential major interactional pattern which would characterize viable marital interaction.

The important discovery was the model's ability to describe "what did in reality exist" via pattern terminology. This finding has significant implications for its use as a clinical, research and educational model for organizing phenomenological data in a wide variety of couple systems. These data organizations become system paradigms which represent each couple's singularity. Dysfunction would be viewed in relation to each couple's idiosyncratic profile rather than to a preconceived idea of health and illness.
The clear trend suggested by these ideas is a move toward a more objective, label-free description of system properties and operations.

**Model Development Issues; Implications for Research and Practice**

The behavioral indicators utilized in this study were developed to define the conceptual categories for classifying observations of process. The categories represent sequential interactive stages of the interactive process. These conceptual stages require behavioral descriptions/definitions. The indicators represent the behavioral definitions. It was important to learn about the relevancy, and clarity of these indicators, as well as their ability to accurately reflect the phenomenological process.

Three issues were examined: (1) Their **validity** for describing process; (2) Their **clarity** (i.e., ability to be understood and used reliably by all observers); (3) The couples' use of the behaviors during their process (i.e., which were more commonly used, least used, identifying patterns in their use by the couples—identifying which couples used what indicators when and how often). The variety of usage and the timing in usage was examined (i.e., what behaviors were used, how frequently, and when (during the time period and/or different usage at different time during different stages of the interactive process).
The understanding reflected in the high agreement on when and how the majority of indicators should be applied demonstrates remarkable indicator usefulness as accurate, reliable and efficient definitions for these conceptual process categories. Apparently, their combined breadth and discriminatory ability enabled the observers to understand and apply them with a minimum of effort. This molar approach is appropriate for exploratory research. These findings suggest that most of the indicators should be kept in the instrument for future investigations to enable additional verification of their usefulness and/or identification of weaknesses not identified in this research.

The problem indicators identified in this study were indicators in Contact and Resolution which may be too similar in behavioral meaning, preventing sufficient discriminate ability. The implications from this finding are the need for additional training regarding these dimensions and further refinement and clarification and consequent instrument modification.

The couples generally demonstrated variety and flexibility in their usage of behavioral indicators. However, some of the couples were coded as using only one indicator in the Resolution category (i.e., summarizing). Based on the overall flexibility and diverse behavioral repertoire of the majority of these couples, this finding suggests a lack of instrument breadth and sensitivity in describing
this interactive stage. Development of new indicators to improve the definition of resolution is suggested by this finding. More accurate indicators for Resolution might be focused energy on cognitive activities such as: clarifications; working out the details; resolving confusion; disagreement, and misunderstandings; emphasizing; rehashing; giving evaluations; stating predictions, future needs and interests; and stating disappointments as well as likes and appreciations.

Additional findings from analysis of potential category confusion were obtained by looking at observer disagreement patterns. The categories which revealed substantial disagreement were Contact and Resolution. This categorical disagreement possibly indicates observer confusion from lack of clarity and explicitness in the behavioral indicators.

These data also have implications for observer training. Clearly more time and emphasis should be focused on describing and/or defining behaviorally the Contact and Resolution behavioral stages. Clarification and redefinition would include more definitive indicators for each category.

Part of the difficulty in accurately differentiating these categories may have resulted from an inherent limitation the laboratory environment created. The interactional tasks and constraints of video-taping limited
the couples to verbal activity, primarily. Although they were instructed to feel free to move around the room, the realities of microphones and the video camera were definite obstacles to activity beyond verbal expression. In future research with this instrument, some methodological changes could be made in the taping technology. In addition, the tasks used to generate data could be changed to elicit more behavioral variety from the subjects. These methodological changes could produce interactional behavior which would more nearly approximate the phenomenological interactional process of couples in the Contact and Resolution stages.

The "Other" category was added to the category system to provide a measure which would tap on dimension of the instrument's validity (i.e., the breadth and sensitivity and relevance of the indicators in describing the actual phenomenological process. Seventy-two observations were recorded from a potential 600. The majority of the observations could be grouped into two categories.

One of the major categories was characterized by the identification of new behaviors occurring during the fifth time frame (last two minute unit of analysis in task) which were not described by the behavioral indicators of Resolution and Withdrawal. These data imply that the actual phenomenological process during this time period within these stages of the interaction may include behaviors which more accurately describe the process than the ones used in
instrument. These behaviors could include random random,
unfocused activity which is clearly separate from the task
activity. This was the new energy recorded in those
couples who were observed briefly experiencing Withdrawal
behavior defined as reduction in energy and pausing and
periods of silence. The new energy which emerged was
observed as random, unfocused verbal and body activity. It
was not utilized to identify a new "figure" of individual
and/or joint interest. Based on these data, more appro­
priate indicators for Withdrawal (the last part of the
closure experience) might be behaviors which encompass the
entire closure experience including the ending piece of
Resolution activity. For example, the indicators for
Withdrawal could be (1) "using up energy and rounding off
the edges of the experience," (2) "reduction in energy,"
(3) "pausing, some moments of silence," (4) "random,
unfocused energy--verbal and/or nonverbal (i.e., just talk,
chit-chat, humor, unfocused body movement, restlessness,
impatience, head and eye movements away from partners,
etc.).

The effects of the research "laboratory" environment
may evoke behavior different from Withdrawal behavior in a
different setting. Although the "research" environment was
not too dissimilar from a professional office environment
which clinicians would use to interview couples. The
Withdrawal behavior in a problem-solving task which is
primarily verbal might be quite different from ending/closure behavior in a more emotional and/or physically active encounter.

Future research would need to attend to this part of the interactive process and seek more data about its real characteristics in a variety of encounters. This research was interested in understanding problem-solving process. Future research which continues to use this kind of encounter and tasks should add new indicators to improve its behavioral description. This effort would be exploratory, as much more information is needed about this specific phenomenon before more refined questions can be formulated. The closure experience remains unclear from analysis of these findings. The added fact that only 16 out of the 30 couples were observed interacting in a manner which could be described as withdrawal is additional support for continued exploration in this area. Most of the couples were observed using active summarizing, clarifying behaviors to bring their encounter to a close. The conceptualized closure experience was defined as a reduction energy with silent pauses after the active summarizing phase. This conceptualization was not verified by the data.

The second major category created from grouping the comments recorded in the "Other" category dealt with "aversive" or "problematic" behaviors. This grouping
described behavior in a time frame which was not congruent with behavior which has occurred in previous categories. For example, the new behavior indicated agreement was not accomplished earlier, even though stated clearly. This new behavior was described as opposing, deflective, and conflictive. It created confusion and a decrease in the partners' energy and system energy. Although viable, asymptomatic couples reveal very little "aversive-problematic" process, clearly identified by observer, it does occur in some behavioral styles. Therefore, the category system needs to be expanded to include this type of process to enable a complete and accurate description of "what is." The findings reveal that this viable population group, may at times, demonstrate process which is more characteristic of populations who experience chronic problematic communication processes.

These observations reveal the instrument's limitation in its ability to record diverse interactional patterns which may become problematic for the system. The implications of this information apply to its use in clinical settings. In addition to research and professional education it should have value for the clinician. A structure and method is needed to collect and organize behavioral data which is dysfunctional for the system. The present instrument appears restricted to the identification of patterns which may or may not be problematic-dysfunctional
for the system. Usefulness in clinical settings may require additional categories and/or behavioral indicators within each category which would describe the potentially dysfunctional interaction for that category.

These modifications would also allow more complete descriptions of interactional patterns in couples who experience chronic stress and severe emotional symptomology. This population group often characterizes the intimate systems observed by clinicians.

Broadening the instrument to include this kind of interactive process would increase the usefulness of the model of its activity to actually describe additional populations beyond the "viable, asymptomatic" group.

Observer Training: Implications for Clinical Education

The methodology developed to answer the two major research questions generated some interesting issues which have implications for clinical education.

The instrument achieved high inter-observer agreement after 12 hours of training. These findings demonstrate its potential usefulness as a conceptual model which can be taught effectively and expediently.

The educational methodology used to teach this model may have merit for clinical education in a graduate social work program. This issue would be appropriate to investigate in research focusing upon educational methodology.
for clinical practice.

These findings do suggest that clinical education which has a similar goal (i.e., teaching a specific conceptual model for assessment and intervention) might be enhanced by including some of the educational methodology used in this study (see Table 37, p. 190, for illustration of training methodology utilized in study).

The objectives in education for clinical social work practice includes the acquisition of knowledge about system behavior and the development of skills in system analysis and intervention. Graduate clinicians are expected to have an understanding of system dynamics and beginning skills in change strategy.

The need to understand behavior in an interactional context has led to the need for theoretical frameworks which conceptualize behavior in relational terms.

The model explored in this study offers a different way of identifying and organizing process from a linear microanalysis. Linear analyses produce fragmented pieces of information about system behavior which are generally summed to form additive descriptions of systems. These are static aggregate representations of system properties (for example, the system has X amount of Y property). Phenomena are assumed to contain amounts of various elements which can be understood by separating and isolating them from the whole for study and then the "whole" is understood. The
holistic process model investigated in this research is designed to study the "whole" as it is, without separating out its elements in isolation from each other. The whole is studied, viewed, as it operates with all its interdependent parts functioning with its own unique coherence which keeps it viable as a living system.

The model offers a structured method for "seeing" pattern configurations within the system's interactional life. Like a kailisdoscope, it looks at process with a holistic lens and generate pictures of the system's processes which occur while two spouses deal with each other in a problem-solving encounter. The pictures focus on how information is handled in the system, energy management, and the processes of union and separation. Data from verbal and nonverbal messages, organismic responses and emotionality are included in the pictorial analysis.

These patterns are judgment free regarding health/illness criteria. The system is offered the opportunity to evaluate their processes and decide upon their functionality in relation to their needs and goals.

The findings that this model can be taught effectively, understood and applied in system analysis with substantial reliability has implications for social work educators who need conceptual models which can be operationalized and successfully applied by graduate students with a minimum of background experience and training.
The findings imply that "interactive experience" can be translated into understandable language and "therapeutic observation" can be concretized and transferred by teachers to students utilizing the scientific method (i.e., focused observation for data collection).

Conclusions

This research sought to discover and learn about the phenomenological process of viable marital interaction. A systemic nonlinear model was developed to operationalize a conceptualization of what this process might look like (i.e., the process components and their interrelationships).

The model demonstrated substantial reliability as an observational system which can identify the process behaviors and describe how they are patterned.

The implication for clinicians, social work educators and human behavior theoreticians is the availability of a model which can be used (1) to contribute to research, as a potential instrument for measuring interactional behavior in family systems, (2) to aid practitioners in their work with marital systems, (3) as an educational tool in graduate clinical social work education.

This research contributes to our knowledge about how to look at interactional experience in an intimate relationship. The model offers a method for translating this perception to others in an organized, understandable way.
The findings add to our knowledge about intimate relatedness; how intimates deal with one another in a problem-solving encounter, work as a unit, maintain their individual and system identity and integrity, and create and sustain flexibility and cohesion.

The variety of interactional styles and patterns which viable couples develop to function as a unit revealed how each couple coheres, fits together. The processes they use to develop and sustain individual and system growth and stability were revealed in the data. This knowledge is valuable information about what constitutes asymptomatic marital interactive behavior and provides a rich supply of new research directions.

Suggestions for Further Research

Some of the research directions have been suggested earlier in the discussion of reliability issues, interactional profiles, model development issues and training implications. An additional research area emerging from these findings concerns the study of adult intimacy (i.e., what characterizes its development and maintenance). Adult bonding and differentiation within relationships are related issues requiring study. For example, What kind of relatedness creates and sustains union and individuation as concurrent and supportive processes?
These questions relate to our need in human behavior science for more knowledge about adult connectiveness, outside the parameters of deviancy or illness which has been the more customary focus of human behavior research.

Clinical social work practice would benefit from studies oriented toward a new epistemology offering concept which describe the circularity of behavior, focusing on connections between behaviors rather than linear thinking which emphasizes the study of behaviors or elements as distinct entities to be understood separate from their context. This new direction in systems thinking is being expressed in the current social science literature. The implications of this new thinking for practitioners is the giving up of a major source of theoretical models explaining and changing behavior. The gap created must be filled with useful, relevant, reliable and valid theoretical models oriented in this new epistemology.

The major clinical and research direction should be the development of paradigms which emphasize circularity, recursiveness, coherence and evolution of human behavior.

These models would offer clinicians a new way of understanding and working with individuals within their intimate systems. The objective becomes seeing connections between behaviors within the various systems individuals relate to and are influenced by (i.e., marital, family, work, social,
etc.). The study of human systems is dependent upon the development of such models.
APPENDIX A

TABLES

162
Table 7
Interactional Profile
(In percent)

<table>
<thead>
<tr>
<th>Couple No. 1 Time 1</th>
<th>Time Frame</th>
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<td>5</td>
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Couple No. 1 Time 2

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### Table 8
Interactional Profile (In Percent)

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Couple No. 2 Time 2

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### Table 9
Couple No. 3, Interactional Profile 
(In Percent)

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Couple No. 15, Interactional Profile (In percent)

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**Couple No. 21, Interactional Profile**
*(In percent)*

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**Couple No. 22, Interactional Profile**
*(In percent)*

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Table 32
Couple 26, Interactional Profile (In percent)

<table>
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<tr>
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<tbody>
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<td>50</td>
<td>44</td>
<td>25</td>
<td>28</td>
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<tr>
<td>Energy/Action</td>
<td>50</td>
<td>56</td>
<td>75</td>
<td>36</td>
<td>63</td>
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<tr>
<td>Contact</td>
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</tr>
<tr>
<td>Resolution</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Withdrawal</td>
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</tbody>
</table>
Table 33
Couple No. 27, Interactional Profile
(In percent)

<table>
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<td>50</td>
<td>33</td>
<td>25</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Energy/Action</td>
<td>50</td>
<td>50</td>
<td>31</td>
<td>62</td>
<td>60</td>
</tr>
<tr>
<td>Contact</td>
<td>17</td>
<td>13</td>
<td>15</td>
<td>40</td>
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</tr>
<tr>
<td>Resolution</td>
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<tr>
<td>Withdrawal</td>
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Table 34
Couple No. 28, Interactional Profile
(In percent)

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<thead>
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<td>26</td>
<td></td>
<td>11</td>
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<td>6</td>
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<tr>
<td>Energy/Action</td>
<td>37</td>
<td>50</td>
<td>44</td>
<td>31</td>
<td>41</td>
</tr>
<tr>
<td>Contact</td>
<td>37</td>
<td>48</td>
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<tr>
<td>Resolution</td>
<td></td>
<td></td>
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<td>17</td>
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<td>Withdrawal</td>
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Table 35
Couple No. 29, Interactional Profile
(In percent)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Time Frame</th>
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<td></td>
<td>1</td>
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<tr>
<td>Awareness</td>
<td>18</td>
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<tr>
<td>Energy/Action</td>
<td>38</td>
</tr>
<tr>
<td>Contact</td>
<td>44</td>
</tr>
<tr>
<td>Resolution</td>
<td>48</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>14</td>
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</table>

Table 36
Couple No. 30, Interactional Profile
(In percent)

<table>
<thead>
<tr>
<th>Categories</th>
<th>Time Frame</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>1</td>
</tr>
<tr>
<td>Awareness</td>
<td>48</td>
</tr>
<tr>
<td>Energy/Action</td>
<td>49</td>
</tr>
<tr>
<td>Contact</td>
<td>25</td>
</tr>
<tr>
<td>Resolution</td>
<td></td>
</tr>
<tr>
<td>Withdrawal</td>
<td></td>
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</tbody>
</table>
APPENDIX B
INSTRUMENTS
<table>
<thead>
<tr>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Awareness</strong></td>
<td>1. Information shared without being asked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Information given in response to questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Questions asked</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Energy/Action</strong></td>
<td>1. The use of energy to reach across to join with another, getting the other person to be in the same place as you. Behavioral indication that someone is interested in something, i.e., through gestures, voice quality, interest words, posturing evidence of arousal, before joining occurs.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>2. Behavioral attempts to mobilize another's energy and interest, i.e., &quot;Let's...&quot; &quot;How about we...?&quot; &quot;Why don't we...?&quot;</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>3. Behavioral indications of willingness to join with another.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Contact</strong></td>
<td>The demonstration of mutual interest in a common, bounded figure.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Behavioral indications that joining, unanimity, like-mindedness occurs, i.e., &quot;Okay, we...&quot; &quot;We are...&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Indications of understanding (agreement is not necessary)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. Being in sync with another</td>
<td></td>
<td></td>
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<tr>
<td><strong>Resolution</strong></td>
<td>Behaviors which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Tests for finishing</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>2. Behavioral attempts to &quot;round-off&quot; any sharp edges remaining to the experience</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Reflections, summaries, or other attempts to &quot;own&quot; the content or experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Celebration or mourning the experience</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>5. Attempts to use up, dissipate leftover energy</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>Withdrawal</strong></td>
<td>1. Reduction in energy so that the experience can fade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Pausing, falling into silence</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Other</strong></td>
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</tbody>
</table>
OBSERVER QUESTIONNAIRE

Observer ID No. ______________
Age ____________
Marital status ______________
Previous courses in family theory/therapy (excluding MSW curriculum) ________________
Previous courses in systems and/or communication theory (excluding MSW curriculum) ________________
Personal growth experience in individual, conjoint, and/or group therapy Yes ______ No ________
Previous work experience in marital/family counseling Yes ______ No ________
Concurrent work experience in marital/family counseling Yes ______ No ________
Area of study (clinical, research, administration, policy and planning) ________________
Point hr. __________
Individual study in family Theory and Treatment (outside required MSW curriculum) Yes ______ No ________
To enable an accurate description of the population studied, the following information is important.

I did want to take additional time from you during the videotaping to obtain these data.

If you will return this to me in the enclosed envelope, I will be most grateful.

Thank you.

Couple ID No. _______

Age of wife _______

Age of husband _______

Number of years married _______

Number of children _______ Median age _______

Age of children, in or out of the home _______

Previous marriage for wife _______

Previous marriage for husband _______

Wife employed outside the home _____ fulltime; ____ part time

Length of time involved in circle group at FCC _______

Number of years _______

Any comments regarding your videotaping experience: positive, negative or whatever _____________________________

______________________________

______________________________

______________________________
APPENDIX C

tasks and instructions to couples
TASKS AND INSTRUCTIONS TO COUPLES

Task A

You have recently been given an unexpected gift of $3,000 to you as a couple, to spend in any way you desire except you are not to invest it in savings or a similar type of investment.

Task B

You are to "Plan Something Together," an activity which involves you as a couple and/or other family members. This activity should be something which you might actually do at some time, thus, it should be within your realities of time, finances, etc.; i.e., not a fantasy trip.

Instructions to Couples

Task A Instructions--I would like to you to talk with each other for ten minutes about how you would deal with the following event:

(Task A)

I hope you can relax and have fun with the discussion; if you get finished before ten minutes, that's fine; if you don't that's fine, also. If you do finish before ten minutes, please wait and remain seated until we come into the room. We will be outside this room for the ten minute time period. The camera will be on when we leave. I would like you to be aware of the time and pace yourselves
in any way you wish. A clock is on the table for your convenience. We will also be timing you and at the end of ten minutes will come back into the room, stop the camera and give you the instructions for the second ten minute task.

Task B Instructions--I would like you to talk with each other for another ten minutes about the following issue:

(Task B)
The same time instructions apply. We will come in at the end of the ten minutes. So do you have any questions about the instructions? OK, you may begin as we leave the room.

End of second ten minute period--general statement of my appreciation for their involvement.
APPENDIX D

CODING PROCEDURES
CODING PROCEDURES

Each ten minute tape will be played without interruption allowing you to view the tape in its entirety without coding. The second showing of each tape will be stopped at the end of a two minute segment, allowing you to code your observations during a 15 second time period. You are to use one hash mark to code occurrence of behavior in the most appropriate category for female and/or male regardless of how often that behavior is observed during the two minute time frame. Non-occurrence of behavior is indicated by the absence of hash marks during that time frame for that behavior(s).

Judgments regarding occurrence and nonoccurrence of specific behaviors should be made on the basis of the context for that behavior. The dominant behaviors are to be coded. You need not code every minute behavior observed. The dominant behaviors which best describe that two minutes should be coded. Decisions regarding how that behavior functions, supports or doesn't support the major sequence will guide how you code behaviors [For example: Does "questions asked" serve the purpose of the couple's development of awareness in their system or increase their energy, or contactfulness, resolution or withdrawal?]

Decisions regarding the major thrust of the two minute segment will guide your coding decisions for individual behaviors. The identification of the dominant pattern of
behaviors and/or task in that interactive exchange is the first coding decision which must be made. This decision guides how you code the individual behaviors. They are judged as either a part of that dominant sequence (pattern) or separate from it (indicating a different behavioral sequence or task and/or blocking, disruptive behaviors). It is the discovery and recording of the connections between behaviors; i.e., pattern identification, which guides your coding decisions. Inferences regarding the meaning of behaviors are not to be made. Judgments regarding the functions of behaviors and identification of their connections are the context for your coding decisions.
APPENDIX E

TRAINING MATERIALS
Table 37  
Observer Training: Time Table and Methodology

<table>
<thead>
<tr>
<th>Educational Methodology</th>
<th>Didactic</th>
<th>Experiential (Exercises)</th>
<th>Video Tapes</th>
<th>Group Discussion</th>
<th>Group Socialization</th>
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<td><strong>Training Time Schedule</strong></td>
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<td>1st Session</td>
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<td>1st hour</td>
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<td>2nd hour</td>
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<td>3rd hour</td>
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<td>4th hour</td>
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<td>2nd Session</td>
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<td>4th Session</td>
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<tr>
<td>4th hour</td>
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</tbody>
</table>

**NOTE:** Refer to Appendix, pp. 191-199 for illustration of didactic material utilized.  
Refer to Methodology Chapter, pp. 81-94 for illustrative material concerning the use of video tapes, experiential exercises, and group socialization to facilitate learning experiences.
ILLUSTRATIVE TRAINING MATERIAL UTILIZED IN DIDACTIC SESSIONS

I. Conceptual Orientation of Research Project

This theoretical perspective reflects a conceptual shift from individually oriented behavior theory to a systems theory orientation. The individual is viewed as part of many interacting systems (i.e., a holistic view). Questions about behavior are answered in the context of interpersonal relationships (i.e., patterns of behavior an individual creates and maintains in his/her intimate relationships).

The systems theory perspective focuses on patterning, organization, structuring and wholeness. Reliance on pattern recognition versus deductive reasoning is the basic format for organizing and interpreting data. The central concepts of wholeness, organization, relationships are used in opposition to reductionism, linear cause and effect. In general, a system's thinking is represented by the corollaries:

1. The whole is more than the sum of its parts.
2. The whole determines the nature of the parts.
3. The parts cannot be understood if considered in isolation from the whole.
4. The parts are dynamically interrelated or independent.

The use of pattern recognition versus deductive reasoning is application of the systems perspective for making sense out of the world. Alfred Kuhn (1979) stated that
pattern recognition must be a major area for scientific investigation in the years ahead.

A comprehensive view of an organismic system, whether it be an individual, group of society must be conceived in terms of its structure, function and process (Hearn, 1969). Organization or patterning arranged along a spatial dimension is labeled "structure." Patterning along a temporal dimension is referred to as "process" or "function." A system's structure and process are interdependent and operate in such ways to reinforce and/or modify each other's make-up. At times the system's processes are largely determined by its structure and at times processes evolve new modified structure. The link is function. Understanding system behavior is dependent upon the analysis of the system's functions and how its processes and structure are interrelated.

II. Theoretical Assumptions Included in Conceptual Orientation

A basic assumption evolving from this theoretical perspective concerns the role of process in formulating system strength, adaptability and capacity for creativity and durability. For example, the interactional process generated in an intimate system creates a structure which may be either supportive of self delineation, nourishing contact, productivity, creativity, or supportive of system
entrenchment, stagnation, symptomology and increasing system fragility.

The clinician is interested in decreasing system symptomology and increasing system viability. This conceptual orientation views individual symptomology as a product of total system interaction. The clinical focus is on identifying patterns (i.e., supporting functional patterns and helping system alter dysfunctional patterns). The system is assisted in creating interactional process and structure which will facilitate individual and system growth. System viability is produced through experimentation and support of new interactional behavior. The task for clinicians is to see the family as a unit and to think of them as a unit.

III. Purpose of Research

This study is designed to identify and describe the interactional components and their structure in a marital system which has accomplished and is continuing to maintain a relational intimacy which supports individual differentiation.

Research Questions: (Process and Structural Variables)

1. What are the verbal and nonverbal behaviors in asymptomatic marital interaction during a problem solving encounter?
2. Is there an identifiable temporal structure which offers some ordering of behaviors within the process?

3. Are patterns observable in the data regarding behaviors clustering during specified time periods within the process?

4. Can the measuring instrument (category system) demonstrate acceptable reliability percentages?

5. Are the behavioral indicators used in the category system to define conceptualized interactive process useful, understandable, reflective of empirical reality?

6. Does the conceptualized interactive process as operationalized in the category system reflect, describe with an accuracy the empirical phenomenological process being observed?

IV. Hypothesized Process and Structure for Viable Marital Interaction

The interpersonal interactive experience cycle is the assumed structure for the interactive process components found in an asymptomatic intimate dyad dialogic encounter. The assumptions regarding how this process might be structured are based on a theoretical synthesis of Gestalt psychology, phenomenology, organismic theory, communication and family systems and general systems theory.

The cycle has five phases organized sequentially (i.e., awareness, energy/action, contact, resolution and withdrawal).
The behavioral indicators used to define these five interactive phases are presented in the observational category system (see Appendix, p. 200). This system represents the data collection instrument for this study. It will be used by you (the observers) to record your observations as you view the video tapes.

V. Theoretical Assumptions Underlying this Specific Hypothesized Process and Structure Translated into Five Interactive Phases

The assumption is that the phenomenological process in asymptomatic marital couples' process will include each of these five phases during a problem-solving task. It is hypothesized that this kind of process is necessary to effectively deal with the task and produce a sense of satisfaction with the problem resolution. It is suggested that an interruption of this cycling process either by skipping phases or getting stuck in a phase will lead to dissatisfaction in the dyad. This process becomes part of the etiological base for the development of individual and/or couple system symptomology and consequent system dysfunction. The corollary is that a full cycling within each substantive encounter builds an intimate relationship capable of problem solving behavior which will continue to contribute to healthy system maintenance. The assumption is that this specific process and structure forms the building blocks and dyadic intimacy which enables effective,
satisfying task functioning and system viability. The con­verse is that problematic process (i.e., skipping phases or stuckness in phases) impedes the system's functioning and prevents adequate task performance resulting in decreased system viability and growth.

If these processes are important in creating system viability, the disrepair of specific processes and/or their lack of development becomes a clinical objective for enhancing system functioning.

These assumptions are not examined in this investiga­tion. They may constitute future issues for research, if acceptable reliability can be established with the present hypothesized interactive process and structure, operationalized in the category system.

VI. Importance of Marital Dyad for Study

It is the crucial component in family system function­ing; according to leading theoreticians in family systems work (clinical and research). This study starts with the dyadic system level. An objective is to gather data for the development of behavioral propositions to enable cross­level system hypotheses (i.e., comparing similar processes at the next higher level of system organization--the nuclear family group within one household). Extended family systems would constitute the next level of organization in family systems research.
VII. Rationale for Studying Asymptomatic Marital Systems

The focus in this study is on the asymptomatic, viable marital system. There is a gap in the research literature regarding what characterizes viable marital interaction. Most research in the family interactional field has focused on the symptomatic family.

The decision to study asymptomatic couples' interactive behavior is based on the need to understand more about viable dyadic intimate relationships which support individual "autonomy" and "fulfilling union" within the system. Knowledge is needed about the kind of process which is supportive of this kind of relatedness (i.e., facilitating individual and system growth).

The objective is to distinguish between fusion and relatedness which supports maintenance of individuality and satisfying union between separate and different people. Relatedness is defined as being powerfully connected with others while maintaining individual integrity and autonomy. It is suggested that contact between people can only occur from this relational position. Fusion is defined as relational intimacy which is dependent and confluent, resulting in the loss of integrity and autonomy during the state of relational fusion (i.e., people lose their sense of self and often stay stuck in this interdependent union). Relatedness enables fulfillment with others while simultaneously
stretching one's independence. In relatedness, the autonomy/dependency polarity is stretched and movement is a constant between each pole depending upon what is needed and most appropriate, at any point in time.

According to the research literature, symptomatic dyads display extremes on this polarity (fusion and detachment). They get stuck at one end of the polarity. Extremes in cohesion supports rigid homeostasis, transgenerational alliances and conflicted marital relationships. Symptomatic systems exhibit extreme difficulties in dialogic encounters. There is little contact between individuals and no support of individual growth which results in individual differences (i.e., change). New behavior is viewed as a threat to system survival and thus negatively reinforced. Individual and system change and growth is feared and blocked in symptomatic systems. Individual thinking and expressiveness is not supported. There is difficulty in group collaboration regarding identifying a common issue and maintaining a topic long enough to enable some resolution and finishing. Usually, there is a form of communication "deviance" (i.e., aversive, deflecting, conflictory, blocking messages) which either result in forced, premature closure and/or no consensus, resolution or closure. Either style results in poor problem solving functioning, and inadequate task performance.
The hypothesized interactive process and structure identifies and describes the kind of interaction which may be an important dimension in creating the kind of intimacy which enables task accomplishment, satisfaction and growth in family systems.

This premise requires empirical grounding and validation to allow its inclusion in the knowledge base regarding marital system functionality. This study does not explore the outcomes of interaction, beyond gathering information on couples style of dealing with a problem-solving task. Satisfaction and growth are not measured, beyond the data obtained.
DEFINITION OF CONCEPTUAL STAGES USED IN CATEGORY-SYSTEM (BEHAVIORAL INSTRUMENT) - GIVEN TO OBSERVERS DURING THEIR TRAINING

AWARENESS

The function or task to be accomplished in the awareness phase is to open up and share data about our experiences with the other. To present raw data. To make intimacy possible, we have to present data about ourselves about our experiences to allow for the chance of joining. People are like icebergs. There is only small percent above the surface. In order for there to be intimacy, one person must make the "beneath the surface" experiences and data available to the other to be placed into the data pool of their system. In the problem solving activity, Awareness is demonstrated by intellectual sharing of many ideas; brain-storming freely, and asking questions of others to get lots of ideas out for consideration, before a commitment is made regarding any specific idea.

The Awareness task is completed when the system is ready to move on and develop energy in specific ideas. If the system becomes stuck in the Awareness phase, system boredom, impatience, apathy, and shutdown may occur. Data are shared but nothing is underlined yet as highly invested with energy.
In a couple system, the Energy/Action phase is demonstrated by spouses talking about their "own ideas"; getting themselves into one idea from various ideas shared in Awareness. The purpose/function of this phase is the allocation of space and time and noticing what you care about and being willing to stand behind it. Energy points to what can matter to us. It begins to organize the data which was shared in Awareness and around which it is possible for us to join and invest in.

Individuals experience and express their interest in something and display this interest to one another allowing this individual energy to flow into the interaction and thereby arouse another's interest.

In this phase, one person advocates, cares about and continues to care about some figure and tries to get the other to join with him/her.

It is a time for both persons in a couple to focus and achieve one figure, for one person to give up, to wait for another time, to address their individual ideas in the interest of joining with their partner in the interaction and joining in the figure which emerges.

The task is completed in this phase when the work is done to hook another, when the other makes self available to be hooked, when efforts to join are displayed; prior to
actual joining—"OK, I'm willing to do...."; "How about we ...."; "Let's...."; are behavioral indications of the willingness to join.

CONTACT

This is the intimate exchange providing an electric passage of energy. There is a crossing over of boundaries, taking in from each other and being a little changed from the interactional exchange. A deeper level of sharing occurs; an intellectual and organismic response is reflected in the interaction. The spouses are connected, sharing and flowing easily on development of a common figure. When they recognize they are joined on a common figure and begin to exchange easily on its further development, they appear to be "in sync" with one another. The common figure becomes a joint creation; a product of individual ideas developed by each other's contributions. In a problem-solving activity, Contact may appear subtle. Information, sharing of ideas, feelings, values, etc., comprise most of the matter exchanged; however, it must include an organismic component of energy. Statements of agreement and/or disagreement and present experiential material which is fresh for each are central characteristics of this phase. Contact is differentiated from the Action phase which is still planning and getting joint ideas developed. Contact is the phase of being "in sync," flowing and each other, getting and giving on the same figure; behavioral demonstration or energy and changes in
body (i.e., breathing fully, active listening, mobile facial expressions, excitement in voice, laughter, active body movement and statements indicating taking in from each other).

The Contact task is completed when the couple begins to lose interest, energy decreases, they appear satisfied, as if satiated and pushing away from the table.

RESOLUTION

This is the phase which allows for separating and doing the work of separating; reestablishing distance from which new Awareness can emerge and become focal. In this phase, we see the beginning of the reestablishment of one's own boundaries and allowing for some insulating spaces, between boundaries (for individual and couple).

This interactive phase is characterized by finishing activities (i.e., clarifying, rehashing what have been agreed and disagreed on; celebrating; summarizing; using up any available energy; saying what needs to be said before you can let go of it and being silent and comfortable). Some couples' level of intensity and hunger or fear result in their getting stuck in the Contact phase. They exhaust themselves. They are afraid to let go of each other and separate; to affirm their separating; allowing closure and completion and subsequent space for the development of new sensations and figures. The potential for new joining and
contact and renewed energy is dependent upon adequate finishing activities. When there is energy tied up in unfinished business, needs go unmet; and the system is less able to carry out its designated functions; the system is stuck.

WITHDRAWAL

This phase's function is to provide a temporal space, a pause, to allow new figures to emerge. The work of the Withdrawal phase is completed when the dyad searches around again for new awareness; when the system is rested enough to interact again.

In this phase, couples have let go of the previous figure. It is truly a resting phase. It is over when new sensations emerge, leading to expression of new awareness from a blank field.

When a couple gets stuck in any phase or bypasses phases, their interactive process is not supporting the development of system viability. Symptoms will eventually emerge; as needs are not met for actualization and the system is less able to carry out its designated functions.

The observers' task is to make judgments about what they see within the context of "figure"; which is the guiding context for decisions about individual and couple's behavior in a specific time frame. The identification of the dominant
interactive behavior (i.e., the figure) indicates which interactive phase the couple is functioning in, at any given point in time.
SUGGESTED REFERENCES

A. Systematic Observation Research


B. Selected References from Family Interactional Research Field


C. Selected References Explicating Conceptual Framework and Premises Guiding Research Investigation


*= especially useful most are summaries of related research in this area.
DEFINITION OF TERMS

Definition of System - There are numerous definitions for system. Von Bertalanffy (1962), James Miller (1971) each have widely accepted definitions which fit the organismic systems model. However, this study will use Hall and Fagen's (1956) definition which is brief, yet comprehensive. "A system is a set of objects together with relationships between the objects and between their attributes" (p. 19).

This definition, according to Gordon Hearn (1958) specifies the basic properties of systems. "Each system consists of objects which are simply the parts or components of the system. There are attributes which are the properties of the objects and there are relationships among the objects and their attributes which tie the system together" (p. 39).

Marital system is a component of the family group system. It carries out a particular function in the total family system. A dyad "is a system at the level of a group" (Miller, 1971).

Asymptomatic marital system - absence, at time of study, of psychiatric, psychological and/or psychosomatic systems, as manifested by lack of these diagnostic labels in either spouse; labeling may be conferred by health care providers, family, friends or self. Absence of marital stress at time of study.
Viability (Viable Couple System) - capable of living, capable of growing or developing; workable; asymptomatic.

Symtomatic marital system - presence of psychiatric, psychological and/or psychosomatic symptoms conferred on one or both spouses by health care providers, family, friends or self. Chronic marital crisis as identified by the couple, family or community.

Interactional structure within a marital system is the organizational pattern, or spatial arrangement of intra- and intersystem communication activity or process. This structural pattern organizes process by establishing functional relationships between parts of process. Within a system, it must be studied, as if time stood still (i.e., the process is arrested "frozen" in order to see the arrangement of components; the pattern of relationships between components.

Interactional process is the ongoing functional inter- and intrasystem communication activity. The patterning of behavioral inputs and outputs in the information processing activity within the system, along a temporal dimension. The internal, nonverbal processing is not available as data for analysis.

Organismic Systems Model - biological system in which energy is primary; the active whole is not reducible to the sum of its parts; organization is an essential concept; the parts derive their meaning from the structured whole.
Epistemology of Pattern - importance of the relationships between components rather than the components themselves; is oriented to shapes, forms and relations. It looks not at objects themselves but at the "patterns which connect." No orientation to things with quantified characteristics; patterns cannot be examined by the traditional experimental approach; holding all factors constant except the variable being studied (i.e., reductionism which is synonymous with the experimental method). The self recursiveness of the patterned field of interaction frustrates attempts to provide such experimental control by immediately changing the very pattern that one is trying to investigate.

Metaphysics of Pattern - dealing with the first or basic principles of pattern; seeks to explain the basic nature of the pattern (the theory or principles of pattern formulation). (Metaphysics - branch of philosophy that deals with first principles and seeks to explain the nature of being or reality.)

Nonlinear, Transactional Systemic Model - describes and explains behavior via recursive circularity. For example, all the parts in a system are engaged in whatever ordering of constancy or change is in question, in an equal and coordinated fashion. The key principle is the continuous recursiveness of all circuits in the couple's system.

Transactional, Nonlinear Systemic Perspective Epistemology - etiological systemic model; causality is understood in terms
of complex feedback models and sets of interdependent forces.

**Recursive Thinking** - "to curve backward, to bend," "to feed upon self" (snake with tail in its mouth).

**Recursive Descriptions** - define an item in terms of its relationships with other items.

**Recursive Language** - all elements of a given process move together.

**Circular Epistemology** - forces the therapist to realize they are inevitably part of a larger field, an inextricable element of that which he/she is attempting to change versus having an impact on "the family system" through personality or technique. This perspective is in opposition to Newtonian physics which assumes a billiard ball model in which causality is linear and forces which act unidirectionally upon things. Newtonian descriptions classify an item according to inherent attributes and characteristics.

Both inductive and deductive reasoning are directed toward the discovery of preceding causes; such discovery allows the uncovering of linear series of events and placing of them in their proper sequence. The holistic systems approach on other hand forces the use primarily of a descriptive language in which the critical elements and the relationships between these elements that comprise the system are identified.
Paradigm - A model; an exhibit; any example. "Family interactive paradigm," the family model, an example of their interactive characteristics as they function together as a unit; a multidimensional description of structure and process illustrating specifically the process; functional characteristics.

Profile - Couple Interactional Profile - a representation or outline of the couple's interactional characteristics; a static, sketchy outline view of the dominant characteristics, emphasizing the structure components.

Idiosyncratic Couple Profile - the couple's unique interactional matrix which characterizes their interactive behavioral patterns; (a structural and process picture of system coherence). It constitutes a functional description of the unit which holds true across time and place.

Family Singularity - the family's unique characteristics, specifically their interactive style, their idiosyncratic patterns of communicational process (i.e., the system identify regarding how they function together as a unit). Each family system has its own unique characteristic style and coherence.

Positive Feedback - deviation activated and deviation amplified. A gradual process by which variation takes hold and the run-away develops, when a system's error activating mechanisms breakdown. Deviation amplifying process which can bring about system change which is constructive
Buckley 1967). Systems must be capable of making structural changes (organizational and values) in order to survive and remain viable. Positive feedback can create morphogenic processes (form and structure changing processes) which increases system viability. This is in opposition to the morphostatic homeostatic criterion as the optimum variable for system survival.

**Positive Feedback Loop** - an increase in any component part of the loop will in turn increase the next event in the circular sequence (deviation-amplifying situation) Maruyama 1963. Constraint is synonymous with pattern, regularity and constancy. This state moves the systems toward increasing structure - organization. A mechanism is needed to introduce variety, flexibility, and change within the system to be in dynamic check and balance with the pulls toward sameness, structure-stability. An organismic system requires a behavioral repertoire; (a potential pool of adaptive variability to effectively deal with changing - internal and external inputs which the system is exposed to continually, as a living system. A positive feedback mechanism promotes newness, experimentation, change, growth.

**Negative Feedback** - counteracting behavior stimulated by information which signals systems deviation. Actions are taken to counteract the reported deviation and direct system to preestablished course. The traditional cybernetic type of feedback. The system maintains constancy, promoting
the status-quo, as it takes in and processes a variety of environmental inputs.

Negative Feedback Loop - establishes a balance between the deviation of different events within the loop.

Family Homeostasis - the maintenance of an acceptable behavioral balance within the family and the tendency to resist any change from that predetermined level of stability. The emergence of the state of imbalance activates a set of built-in mechanisms that ultimately act to restore the homeostatic balance of the family.

Family-level Stability - individual fluctuations are balanced by the performance rates of other members within the same family over time, resulting in the family's relative activity rate.

Linear Thinking - describes and explains behavior in reductionistic terms (A + B = C). Cause and effect thinking; A using B acted upon C to effect D.

Linear Perspective - having only one dimension in the analysis and description of the phenomena. Description and explanation using a straight line - sequential method.

Cohere - to stick or hold together; to be logically connected; to cause, to form a united or orderly whole.

Coherence - the quality or state of logical or orderly relationship of parts; consistency; congruity; how parts of a system fit together in a balance (1) internal to itself and (2) external to its environment.
Fusion - to mix together by, or as if, by melting; to blend to become mixed or united by melting together.

Morphogenesis - evolutionary development of the structure of an organism, or part.

Figure - the dominant interactive behavior of the couple within a designated observational time frame, an identified issue or theme (cognitive or behavioral) which is in the observer's foreground as they observe the couple's interaction.

Transgenerational Coalition - involves two persons from the same level in a status hierarchy and one person from a different level. It involves a coalition of two who are on different levels against the left-out one. (Different from an Alliance based on common interests and not involving a third person.) Coalition is characterized by two persons joined together against or to the exclusion of a third and this coalition is covert.

Metaphoric Communication - figurative language; term is used in analogy; ordinarily used to refer to an object, now refers to another via implicit comparison.

Phenomenology - the branch of science that classifies and describes its phenomena without any attempt at explanation; the study of all possible occurrences in human experience during which consideration of objective reality and/or purely subjective response are temporarily left out of account. The phenomenological approach to psychology
involves curiosity about experience. "Erlebnis," present experience that which is immediately there for the observer without reference to its origin; raw uninterrupted flow of the organism; the uninterpreted, uninterrupted organismic process (flow of the organism); the phenomena occurring without explanation.

**Typology** - the study of types, a systematic classification. **Dialogic Encounter** - reciprocal confirming verbal and non-verbal communication between the marital dyad which represents fully, the individual position and the understanding of the other. Overt, active recognition of each other's differentness.
APPENDIX G

CONTENT ANALYSIS OF "OTHER" CATEGORY
CONTENT ANALYSIS OF "OTHER" CATEGORY

Category
1. nonfocused chit-chat, irrelevant to task
2. extreme uniqueness in pacing of international processes
3. behavior belonging to category and not included in the behavioral definition of that category
4. new energy, unfocused—observed after withdrawal behaviors; not defined by indicators in category system
5. aversive, blocking, conflictive behavior
6. confusion regarding task instructions
I'm writing to invite you to take part in a research project of an Ohio State University graduate student I'm working with in the area of Family Studies. She's trying to design a system for describing verbal and non-verbal behavior between couples. In order to complete her design she needs to have on tape thirty couples doing two ten-minute problem solving segments on very lightweight issues such as planning a vacation or something of that nature, so she can study verbal and non-verbal behavior. She's asked me if I could invite some couples to be on video tape with these kinds of discussions so that she then can have a group evaluate the tapes according to her model and then she'll throw the tapes away immediately afterward. There is complete confidentiality and she's not as interested in the amount of depth you go into as much as the process of communicating.

If you would be open to assisting Judy and her project, she will be taping on Saturday, March 28 from 9 o'clock in the morning until 3 o'clock in the afternoon. And Sunday, March 29 from 12 noon until 4 o'clock. Almost all of the half-hour slots are now open and if you'd call my office in the next week, we could schedule you in to do this.

I realize that this is asking a great deal of time to make a special trip to the church and spend a half hour, but I think Judy's project is very worthwhile and there's no way that she can develop her ideas about family communication except to have families communicating. If you participate, your time will be towards a very worthwhile project.

Thanks for considering this idea.

Sincerely,

Lynn Whybrew

Lynn Whybrew

LEW/gf
May 5, 1981

Dear Lynn,

The video taping project proceeded smoothly and effectively due to your generous support and strategic assistance with key elements. Mrs. Grace Feller was immensely helpful and truly a joy with whom to work.

The project goals were achieved in record time within an atmosphere of cooperation, enthusiasm and respect created by you and the First Community staff.

The entire experience was personally and professionally rewarding for me. The feedback from those who were involved in the project is very positive and reveals a great deal of interest in and appreciation of the research goals as well as pleasure from participating in the project.

I am grateful to you and your governing board for allowing me this opportunity to work with you.

Thank you,

Sincerely,

Judy Penrod
Dear

I am taking this opportunity to thank you again for your gracious gift of time, energy and enthusiasm to aid me in this research endeavor.

I was consistently impressed with your positiveness, honesty and selfless commitment which made the experience a joy for me.

I will always be personally indebted to you for your responsiveness and generosity.

As I mentioned to you, the written findings will be shared with you. Your comments and feedback are always welcome, at any time, during this research process.

Hopefully, we will all learn a little more about healthy marital communication, as a result of your participation.

With much appreciation,

Judy Penrod
The Ohio State University
College of Social Work

ATTENTION MSW I STUDENTS

April 22, 1981

Announcing: new "Independent Group Studies" course for 2-3 credit hours. This course is part of a dissertation research project. It will involve a flexible time commitment starting mid-May through June 1981. The credit hours will be officially registered during the Autumn Quarter of 1981 with Dr. Wm. Eldridge!

Course Objective: Training and experience in applying systems theory in the assessment of marital verbal and non-verbal communication.

Through observation and analysis of video-tapes students will learn to see and hear and assess system interactional behavior.

If you are interested in participating for credit and/or would like additional information, please indicate your interest and return this to me, as early as possible, deadline May 1 via my mailbox on 3rd floor, Stillman Hall doctoral students' mail boxes.

Thank you

Judy Penrod

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NAME _______________________

PHONE:   DAY _______
         NIGHT _______

I would like to be involved in this course
I would like additional info.
The Ohio State University
College of Social Work

FROM: Judy Penrod

RE: Research project on marital interaction--
independent group studies course

We are having a brief meeting on 5/12, 12:00-1:00 p.m. in
the student lounge, Stillman Hall, to discuss the project,
answer questions, set time, etc. Bring your lunch, if you
like.

I hope you can attend this meeting. I realize how busy
you all are and how tight your schedules are at this point
in the quarter. If you are unable to be there, please
indicate such on this memo and return to me. I'll contact
you by phone so we can arrange another time.

Looking forward to meeting you.

Thank you.

JP/dkd
APPENDIX I

VOLUNTARY CONSENT FORM
Research Involving Human Subjects Consent to Serve as a Subject in Research

I consent to serve as a subject in the research investigation entitled: Analysis of Marital Couples' Interaction: Structure and Process.

The nature and general purpose of the research procedure have been explained to me.

I understand that any further inquiries I make concerning this procedure will be answered. I understand that my identity on videotapes will be protected by the research investigator and that these tapes will be used exclusively for this research project and no other purpose. I understand the tapes will be erased after the coding procedure. I am giving my consent to be voluntarily videotaped and understand that I am free to withdraw my consent and discontinue participation at any time following the notification of the research investigation.

Signed ___________________(Subject)__________________________

Date ________________________________

Witness

Investigator
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